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INTEGRAL ECOLOGY AS APPLIED TO ENVIRONMENTAL POLICY, POLITICS AND DEMOCRACY

The Integral Policy Tryptic: A framework and praxis for understanding and adapting to complex social, ecological, and political systems

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DECLARATION

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ABSTRACT

The thesis examines the application of the metatheoretical discipline of integral theory to environmental policy, personal and collective politics, and democracy. It reconsiders a range of questions environmentalists continue to pose around who or what is responsible for our environmental problems and how challenges can best be met. It demonstrates broad agreement between some environmental scholars on some matters, but shows, using the insights of integral theory and integral ecology, that until relatively recently there has been no robust theoretical framework for integrating ecological approaches and perspectives, each of which have some applicability to environmental problem-solving. It is posited that integral theory and its environmental cousin, integral ecology, can integrate seemingly disparate approaches in environmental policy development and democratic governance, and that an integrative approach is also the key to the development of any kind of green or ecological state. The type of integral ecology used in the thesis - that of Sean Esbjörn-Hargens and Michael Zimmerman ('EZI') – is placed within the field of other emerging *integral ecologies*; integrative ecological frameworks developed by Leonardo Boff, Mark Hathaway, Thomas Berry, Brian Swimme, Félix Guattari, Edgar Morin, and Pope Francis. Wilberian integral theory, upon which EZI is based, is shown to be part of a long tradition of scientific and philosophical thought aimed at developing integrative models and methods.

A proposed new integral framework for policy, politics and democracy known as the *Integral Policy Tryptic* (IPT) is then briefly presented. To supply additional methodological rigour, the use of Wilberian integral theory, EZI, and the IPT model, is framed by Mark Edwards' methodological approach for metatheorising. This requires the "four involvements of method, data, interpretation and theory" and also a researcher's explicit acknowledgement of their metatheorising intentions. Metatheorising uses other theories - from subjective, relational and objective sources - as 'data', and the IPT model and method is premised on Wilber's integral framework, EZI, and the use of Edwards' injunctions. The proposed 'case study' for the IPT model – Antarctic policy and politics – is then briefly discussed. The development of Wilberian integral theory is charted in some detail and a substantial background on integral theory and integral ecology is presented. Particular areas to which prominence is given include: Wilber's Quadrants or main four perspectives (objective, interobjective, subjective and intersubjective); levels and lines of development; Integral Methodological Pluralism; moral and cognitive development; and the Terrains, Niches and Ecoselves of integral ecology. In the introductory method chapters, a number of the tensions between integral theory and other key environmental critiques, such as ecofeminism and deep ecology, are explored, and, in the spirit of integral ecology, some tentative bridge-building is attempted. Some practical examples of how an integral approach could be used as a framework for Antarctic policy are then provided. The tendency of green theorists to throw the baby of modernism out with the modern bathwater is also discussed. Integral theory, it is shown, could salvage the "dignities" of modernism, for example the differentiation of arts, morals and science, while also dealing with its "disasters", these being disassociation and the consequent perspectival hegemonies that reduced subjective and intersubjective interiors to external objective and interobjective correlates.

The IPT model is then presented in full. It gives an ecological patina to Wilber's "I", "We" and "Its" by labelling the pronouns as "Person", "Polity" and "Planet" respectively. The Person represents the subjective perspective (EZI's Terrain of Experiences), and focuses on the adoption of a personal integral praxis. The Polity is the intersubjective (EZI's Terrain of Cultures), and focuses on the communications within and between sub-jurisdictions and individuals in the Polity; and the values shared and agreed upon through these communications. The Planet is the combined Terrain of Behaviours and Terrain of Systems, and focuses on objective and interobjective policy approaches, such as the hard sciences, economic and

ecological modelling, legislation and regulation. The IPT model is presented as both the method for the thesis *and* a potential new integral model for the review and analysis of middle-range theory relevant to policy, politics and democracy. This is followed by an explanation of the Planet aspect of the Integral Policy Tryptic, focusing on the use of objective and interobjective disciplines and perspectives such as chemistry, biology, international relations, political analysis, system sciences and behavioural policy development. In this case the subject of many of the disciplines used is Antarctica. In particular, it is demonstrated that the future policies and politics of Antarctica will not just be the result of objective structural or material effects - for example the potential exploitation of mineral resources – but also a result of the intersubjective *framing* of Antarctica. Hence, the importance of the normative discourses underlying this framing, and the need for an integral ethic to underpin national and global institutions, are emphasised. Discussion of the Polity aspect, which fleshes out such an ethic, follows, focusing on the intersubjective - in this case the distinctively Habermasian, albeit ecological, critique and practice of Robyn Eckersley's critical political ecology, her “Green State” and her more recent work with others on the environment and globalisation. This critical yet real-world approach is complemented by a view of integral democracy based on John Keane’s ‘monitory democracy’.

The Habermasian principles underlying Eckersley's' approach are explored. In particular, Habermas’s unconstrained dialogue and communicative action are shown to be the keys to influencing normative discourses on environmental, policy, political and democratic issues. Finally, the Person, or the subjective, is explored. This was done through an interpretation of the author’s ecoselves and other interior aspects of a personal Antarctic experience, notes on how each ecoself can be best communicated to in political communications, and a brief exploration of two iconic Antarctic explorers and their ecoselves. The Person is also examined using a transpersonal research approach known as organic inquiry and through proposing a hypothetical individual called the Integral Policy Adviser, who, as well as having a good grounding in practical political *skilful means*, enacts an integral model through the use of the Integral Policy Tryptic. The discussion and conclusion reiterate how the use of an integral framework by environmental policy practitioners, political advisers and political parties would enable the honouring and inclusion of a diverse range of environmental or broader policy approaches and views in proposed solutions. They show how the constituent theories of the IPT model (integral theory, EZI, Habermas’s critical theory, Eckersley's critical political ecology, and a wide range of other theories, disciplines and studies used to 'populate' the IPT) have been used according to Edward’s metatheorising injunctions to create a new overarching model that successfully applies integral ecology to policy, politics and democracy, at least at a broad but robust conceptual level. The thesis thus answers the question of what or who is responsible for the environmental challenges by answering it is *many* "whats" and *many* "whos". To create solutions to environmental problems therefore requires the mapping and understanding of complex policy and political landscapes, and for this an integral approach is recommended.

1. Overview of methodology and Wilberian integrative thought

1.1 Personal Origins: Can Integral Theory Bridge the Ecocentric-Anthropocentric Divide?

> *Then the earth grew old, its landscapes mellowing and showing signs of age, its ways becoming whimsical and strange in the manner of a man in his last years...*
> - Michael Moorcock, *Count Brass*[1] -

In a recent paper, Michael Zimmerman gives an overview of climate change based on the multidimensional perspectives of Integral theory. In the paper he provides some "autobiographical remarks" to show why he frames the climate debate using an integral approach. As part of this he gives a history of the development of his own worldview, thereby demonstrating his "environmentalist credentials."[2] While I cannot match his credentials, I will to begin this thesis at least cover the formation of my own worldviews, and how they led to the key questions in this thesis about integrating various environmental perspectives and views - and a proposed solution. The nature of Integral theory – its call to include both the subjective and objective when using it - is such that an introduction to the discipline must often include the injection of at least some of the author's own story. A thesis is, of course, an author's attempt to make sense of part of the world and then to contribute this understanding to a wider pool of knowledge. This thesis is in the main about politics. It emerged from one stage of a long personal journey which had reached a point where a personal dilemma demanded both a new personal and political solution.

The political views of my early teenage and later years were strongly influenced by my Labor-voting, union-supporting father, and, to a smaller extent, by a mother who voted for the Australian Democrats. These political preferences, particularly the former, stayed with me until my early 20s, where, like many university-educated people, I began supporting green politicians and policies. This was not a particularly radical change, as my parents had raised me with a strong environmental ethic. Also, my undergraduate studies had been in ecology and zoology, so I was acutely aware, from a scientific viewpoint, of the impacts on nature from human activity. I did not abandon my strong belief in unionism or progressive values, which stay with me to this day. But a large part of the progressive green agenda seemed to make sense to me from my early 20s to mid-30s. From around the age of 23, my green leanings were enhanced and further underpinned by continuing study in the field of ecology and in several courses in environmental values and philosophy. The latter made me more fully aware of the diversity of views on environmentalism. I became familiar with terms like anthropocentrism, ecocentrism, deep ecology and ecofeminism, and I began to more fully appreciate the need to approach problems in a multidisciplinary way, using my previous training in objective science, but also drawing upon more subjective disciplines.

My strong environmental ethic meant that I identified closely with many variants of ecophilosophy. As well as engaging with these academically I also became involved in some activism. Although never an overt or particularly enthusiastic protestor, I had stints in various campaigns with a number of environmental

[1] Michael Moorcock, *The Chronicles of Castle Brass*, Grafton Books, London, 1985, p. 5.
[2] Michael E Zimmerman, 'Changing the conversation: Rethinking the Climate Change Debate from an Integral Perspective', *Journal of Integral theory and Practice*, 2014, 9(2), pp. 115–136.

groups. My main expression was through academic and creative writing, involvement in ecological fieldwork on small mammals in the Tasmanian Wilderness World Heritage Area, and immersion in nature writing and poetry, particularly that of Robinson Jeffers. Jeffers distils the ability of nature to overwhelm and reduce the self to its place in nature's immensity and inhumanism.

The storm-dances of gulls, the barking game
of seals,
Over and under the ocean …
Divinely superfluous beauty
Rules the games, presides over destinies,
makes trees grow
And hills tower, waves fall.
The incredible beauty of joy
Stars with fire the joining of lips, O let our
loves too
Be joined, there is not a maiden
Burns and thirsts for love
More than my blood for you, by the shore of seals
while the wings
Weave like a web in the air
Divinely superfluous beauty.[3]

These artistic endeavours and solo work in the Tasmanian wilderness, along with a long cross-country skiing trip, led to at least two or three wilderness "peak experiences" over a two year period, which were formative in the development of my environmentalism. However, the involvement in activism had actually left a slightly bitter taste in my mouth. Whether this was just due to individual personalities, the seemingly overly bureaucratic and (ironically, we will see) hierarchical structure of some activist groups, or a growing dissatisfaction with some aspects of green politics, is now difficult to untangle.

Nevertheless, in my mid-20s I began to question some of the philosophy underpinning green organisations, and to have some empathy for those who saw the greens as being almost religious in their zeal. While fully appreciating the need for society to adopt an ecological or even ecocentric approach, I came to doubt that this would be achieved by the greens alone. I also doubted that an ecocentric approach would ever be widely adopted by humans. Although the greens' contribution to such an eventual goal was probably unmatched in modern Australian political history, a deep doubt had arisen as to whether their current philosophies were up to the task. There were certainly many aspects of the green approach that continued

[3]Robinson Jeffers, 'Divinely Superfluous Beauty', in Hunt, Tim, ed, *The Selected Poetry of Robinson Jeffers*, Stanford University Press, Stanford, California, 2002.

to resonate with me, but I was searching for a way to best articulate my changing political beliefs. It was around this time that I came across Ken Wilber's *A Brief History of Everything*.[4] *A Brief History* is a "non-academic" summary of Wilber's weightier tome: *Sex, Ecology, Spirituality,*[5] which I also later read. These books provided an expansive and yet inclusive philosophical view of the world, of evolution, and the need to use a diversity of approaches and disciplines to solve the complex issues facing humanity and the planet. In short, they posited an *Integral* approach: a balanced, multidisciplinary and evolutionary/developmental method to solving problems.

Most importantly for me, the integral model allowed me to properly articulate the origins of my dissatisfaction with green policy and politics, as although he did not use the term integral ecology, Wilber's model is implicitly ecological.[6] I could now partly understand why the greens were mostly on the right track, useful for at least some of the transition to an ecological society, and yet in some ways ill-equipped to bring it about. In particular, Wilber's books gave me an understanding of why an ecocentric approach was valid and useful, and yet completely inadequate by itself to underpin a green or ecological revolution. Over twenty years have passed since then, and there has been a great deal of change in political practice. I believe this evolution has increased the likelihood that green parties are likely to be at least one of the major agents to help bring about widespread support for an ecological politics. But I do not think it will be the ecological society that the greens might currently envisage or that, by itself, their existing philosophical base is up to the task. My assertion in this thesis is that the greens, or indeed any political party, can only achieve an ecological society through broadening and deepening its base philosophy with an Integral approach.

What or who is responsible for the environmental challenges facing humanity and the beings we share the planet with, and who or what is best placed to solve our environmental dilemmas? Is it me or you as individuals; our beliefs, or the habits and drives in our subjective minds? Is it the collective and intersubjective world that we call culture; our consumerist, human-centred society? Is it the combined effects of single physical particles colliding or neurotransmitters passing between nerve endings? Is it the result of complex political, economic or ecological systems, which, by objectively mapping and attempting to control, we can identify and thus remedy any dysfunction? Do we look to environmental psychology to tackle our ecological problems? Can we use Deep ecology to shake us out of our anthropocentric follies, or ecofeminism to rid us of our anti-ecological and largely pathological patriarchy? Would more widespread capitalism and technological fixes work? Do we need to reject our reductionist and atomistic sciences? Do

[4] Ken Wilber, *A Brief History of Everything,* Shambhala, Boston, 1996.
Frank Visser, *Ken Wilber: Thought as Passion*, State University of New York Press, Albany, 2003, p.31.
[5] Ken Wilber, *Sex, Ecology, Spirituality: The Spirit of Evolution*, Shambhala, Boston, 1995.
[6] Sam Mickey, Sean Kelly and Adam Robbert, 'Introduction: The History and Future of Integral Ecologies', in Mickey,S, Kelly, S and Robbert, A, eds, *The Variety of Integral Ecologies: Nature, Culture and Knowledge in the Planetary Era*, State University of New York Press, Albany, 2017, pp. 1-27.

we trust in the Invisible Hand of the Market, or base our solutions on assuming we are part of the Web of Life and look to the sciences of complexity so we can co-exist in a world of systems and processes?

Practitioners using Ken Wilber's integral theory and Sean Esbjörn-Hargens' and Michael Zimmerman's integral ecology ('EZI' or just referred to as "integral ecology") will propose that it can be none of these things alone, but must be all of them together, or at least a well thought out measure of each. Those using these integrative or integral frameworks posit that each approach to understanding and remedying our ecological challenges has its own merits and its own weaknesses. They recognise that a multitude of approaches can be partly successful and yet partly lacking when used in isolation, as each is based on a particular viewpoint that reveals only part of the rich tapestry of nature and the humans that are part of that tapestry. That there is more than one reason for our ecological problems is nothing new. It is a reasonably logical position to take, as borne out by the blossoming of multidisciplinary and transdisciplinary environmental investigations, and the development of related metatheory. Wilber's integral and EZI go further by showing why studies that use a variety of disciplines might be more successful: they include more perspectives, both subjective and objective; more of the disciplines and methodologies with which we have been able to make sense of the world. They include more of the realms or domains that constitute reality. In the same way that a good map helps us find our destination, these integrative approaches provide a map of reality that could help stake out the routes to resolve a multitude of modern dilemmas.

Why should we apply integral approaches to policy, politics and democracy? Ken Wilber said that “the study of psychology inevitably leads to sociology, which inevitably leads to anthropology, which leads back to philosophy. And then, strangely, bizarrely, that leads to politics.” [7] As Visser notes, psychotherapy seeks people’s reasons for unhappiness and promotes the reduction or removal of maladjusted behaviour. However, the individual psychological approach doesn’t address a maladjusted or dysfunctional society and hence psychology leads to sociology. A healthy society cannot be developed without a comparison to other cultures, thus leading to anthropology. This comparison requires philosophy to compare (or imagine) cultures in order to identify the values we want to live by. Inevitably, this desire to create these values requires a political vision and political action that promulgates these values.[8] Having briefly explored my personal, political, philosophical and theoretical reasons for adopting an integral approach, in the following sections I provide a more detailed overview of my proposed methodology. It summarises the strains of integral theories and methods to be used and places them within an intellectual and historical pedigree of integrative thought. It also adopts a methodological framework which is designed to increase the rigour of metatheoretical endeavours.

[7] ‘Bodhisattvas are Going to Have to Become Politicians’, *PANTA*, Spring 1996, p.12, cited in Visser, *Ken Wilber,* p.34.
[8] Visser, *Ken Wilber*, pp. 34-35.

1.2 Methodology: Integral ecologies and the Integral Policy Triptych

In this thesis I propose that an ecological - yet human-scaled - politics, one that can bridge the ecocentric-anthropocentric divide, is more likely to arise where policy, politics and democracy are underpinned, informed and driven at the community, policy, political and democratic level by a multiplicity of *integral ecologies*. Integral ecologies is the label for a "variety of emerging approaches to ecology that cross disciplinary boundaries in efforts to deeply understand and creatively respond to the complex matters, meanings, and mysteries of relationship that constitute the whole of the Earth community."[9] These approaches have in common a respect for the adoption of a multitude of ecological perspectives on - and methodological approaches to - solving environmental, social, and economic dilemmas. Those using such approaches may not agree on the exact details or methods of execution. They do agree that the reality is pluralistic, and to tackle any kind of problem a plurality of approaches or perspectives is required; ordered and given effect through an integrated or integral approach. Integral approaches are also a form of metatheorising. Zachary Stein considers metatheory to "simply be understood as referring to a type of super-theory built from overarching constructs that organize and subsume more local, discipline-specific theories and concepts. Roughly: whereas a theory within a discipline typically takes the world as data, metatheory typically takes other theories as data."[10] Others have similar definitions.[11] Ideally, contemporary metatheoretical pursuits should be based on the application of a scientifically-informed methodology. I will return to this important element below.

The key integral ecology used in this thesis is that of Sean Esbjörn-Hargens and Michael Zimmerman, as laid out in their book of the same name. It also includes Esbjörn-Hargens' pioneering integral ecology papers that formed the basis of much of the latter book, which adapt Wilber's "AQAL - all quadrants, all lines, all levels" analysis using as a base four basic perspectives: subjective, intersubjective, objective and interobjective.[12] Esbjörn-Hargens' and Zimmerman's integral ecology ("EZI") is in itself a method, through its application of Wilber's Integral Methodological Pluralism.[13] This is the methodology I use, which calls for

[9] Mickey, Kelly and Robbert: The History and Future of Integral Ecologies, p.1

[10] Zachary Stein, 2010, On the Normative Function of Metatheoretical Endeavors, *Integral Review*, July 2010, Volume 6, No 3, pp 5-22.

[11] Mark Edwards, 2013, Towards an Integral Meta-Studies: Describing and Transcending Boundaries in the Development of Big Picture Science, *Integral Review*, June 2013 Volume 9, No 2, pp 173-188. Edwards defines metatheorising as the "scientifically grounded activity of developing overarching views from the integration of other respected sources of valid cultural knowledge and verified streams of scientific research" (p.180). He uses Ritzer's definition of a metatheory, being a broad perspective that overarches two, or more, theories. See George Ritzer ,' Metatheory', in G. Ritzer Ed., *Blackwell Encyclopedia of Sociology,* Wiley, New York, 2006.

[12] Sean Esbjörn-Hargens and Michael E Zimmerman, *Integral Ecology: Uniting Multiple Perspectives on the Natural World,* Integral Books, Boston, 2009; Sean Esbjörn-Hargens, 'Integral ecology. An Ecology of Perspectives', *Journal of Integral theory and Practice,* 2006, 1(1), pp. 267 – 304; Sean Esbjörn-Hargens, 'Integral Ecology. A Post-metaphysical Approach to Environmental Phenomena', *Journal of Integral theory and Practice,* 2006, 1(1), pp. 305 – 378; Sean Esbjörn-Hargens, 'Integral Ecology: The What, Who, and How of Environmental Phenomena', *World Futures*, 2005, Volume 61 (1-2), pp.5 - 49; Michael Zimmerman, 'Integral Ecology: A Perspectival, Developmental, and Coordinating Approach to Environmental Problems', *World Futures: The Journal of General Evolution,* 2005, *61*(1-2), 50-62.

[13] Esbjörn-Hargens and Zimmerman, *Integral Ecology,* pp. 247-256.

the use of at least eight methodologies or disciplines to fully understand environmental, policy, political or democratic issues.[14] Esbjörn-Hargens' and Zimmerman's ecology is not the only strain of integral ecology in this "emerging paradigm in ecological theory and practice."[15] Several varieties of integral ecology sprang up around 1995, and have done since, adding to the comprehensiveness and robustness of these ecologies as multi- and trans-disciplinary methods.[16] These ecologies have a framework that always considers the subjective or interior aspects of ecology - or other disciplines and schools of thought. The term I use later, borrowing from EZI, is *restoring the interiors of nature*. Integral ecologies take earlier attempts to integrate ecology across scientific disciplines, but go a step further by integrating the methods of the biophysical sciences with those of the humanities and social sciences.[17] The origin and recent history of these integral ecologies is detailed elsewhere.[18] Background on Ken Wilber and the pioneering development of his own robust strain of integrative and integral thought is included in this chapter, as is a brief background on EZI.

This thesis uses EZI, Wilber's Integral Methodological Pluralism (IMP), and a broader integral ecological framework - which requires methodologies to investigate subjective and objective aspects of reality - as a base for the development of a new integral ecology model and methodology known as the Integral Policy Triptych (IPT). The IPT applies a type of integral ecology to policy, political, and democratic issues. The proliferation of integral ecological approaches and the use of EZI as the methodology for this thesis is testament to the growing understanding across many disciplines and schools of thought that there is a need for a more comprehensive approach to solving world-level problems; finding solutions using many perspectives and disciplines through the prism of integrative metatheories.[19] Wilberian integralism, whether that of integral theory generally or of EZI, falls into an ancient tradition of scientific and philosophical efforts aimed at developing integrative models and methods[20], proponents of which include Thomas Aquinas, Georg Hegel, Michil Bakunin, Vladamir Solovyov, Pitrim Sorokin, Rudolph Steiner, Jean Gebser, Aurobindo Ghose, Jacques Maritain, Bill Torbert, Ervin László, Fred Dallmyr, Ronnie Lessem and Alexander Schieffer.[21] Other authors have traced the genealogy of integrative thinking through "five philosophico-historical attractors, orientations, contexts or moments, namely, Hermetism; Neoplatonism; Renaissancism; the nexus of German classicism, romanticism and idealism; and reconstructive postmodernism."[22] To these lists can also be added the developers and proponents of a wide range of

[14] *Ibid.*, p.243.
[15] Sam Mickey, Adam Robbert, Laura Reddick, 2013, 'The Quest for Integral Ecology', *Integral Review,* September 2013, Volume 9, No 3, pp 11-24.
[16] Mickey, Kelly, and Robbert, 'The History and Future of Integral Ecologies', p.8.
[17] These include the ecologies of Leonardo Hoff, Thomas Berry and Ken Wilber, see The History and Future of Integral Ecologies, p.8.
[18] Mickey, Kelly, and Robbert, 'The History and Future of Integral Ecologies', pp. 8-19; Mickey, Robbert and Reddick, 'The Quest for Integral Ecology.'
[19] 'Towards an Integral Meta-Studies.'
[20] Ibid., p.174, 181.
[21] Ibid., p. 173.
[22] Gary P. Hampson, 2013, 'Toward a Genealogy and Topology of Western Integrative Thinking', *Integral Review*, June 2013 Volume 9, No 2, pp 46-75, p. 46; Jennifer M. Gidley, 'Global Knowledge Futures: Articulating the Emergence of a New Meta-level Field', *Integral Review*, June 2013 Volume 9, No 2, pp 145-172.

integral ecologies - whether or not they have labelled their approaches as specifically 'ecological' or even integral: Leonardo Boff, Mark Hathaway, Thomas Berry, Brian Swimme Sean Esbjörn-Hargens, Michael Zimmerman, Ken Wilber, Félix Guattari, Edgar Morin, and Pope Francis.[23] This is by no means an exhaustive list of integral scholars. That the Pope has ventured into the realms of the integral ecologies is not surprising, and is worth raising as a key point about the penetration of (at least types of) integral ecology into the consciousness of the leaders of large global institutions. Esbjörn-Hargens and Zimmerman accord Saint Francis of Assisi's Canticle of Brother Sun[24] - which the pope draws upon in his encyclical letter, *Laudato Si': On Care for our Common Home*[25] - a very lofty position in their developmental scale of ecological consciousness, that is EZI's "ecoselves." Saint Francis is seen as representing the "ecosage" level of development.[26] These are rare human gems. But when they emerge they are highly integrative thinkers whose thoughts and methods integrate a wide range of ecological approaches to help establish sustainable individuals and systems. They are, if you like, the paragon of integralists, the top of three developmental integral perspectives.[27] Pope Francis' thought, scope and thesis is integral. The encyclical is not just about the environment or climate change, but tackles broader questions about our relationship with nature and relevant perspectives on progress and development.[28]

However, while the paragons are there to be admired and emulated, the practical work of integralists and integral ecologists goes on. That is why I have selected EZI to form the basis of the integrative methodology developed in this thesis, as Wilber's IMP provides a practical methodological base. There is also a growing synergy between science, policy and religion, which is reflected in these diverse integral ecologies.[29] Mark Edwards sums it up:

> We are entering a period in human civilisation when we will either act globally to establish a sustainable and sustaining network of world societies or be enmired, for the foreseeable future, in a regressive cycle of ever-deepening global crises. If we are to take the former pathway then we must, as a matter of some urgency, develop and institutionalise integrative and meta-level forms of scientific sense-making. This meta-level form of sense making will complement existing disciplines to establish a multi-layered understanding of science that will have the capacity to take a reflexive perspective on current scientific and philosophical theory building and testing.[30]

[23] Mickey, Kelly, and Robbert, 'The History and Future of Integral Ecologies.'
[24] Brian Moloney, *Francis of Assisi and His "Canticle of Brother Sun" Reassessed*, Palgrave Macmillan, New York, NY, 2013.
[25] Pope Francis, 2015, *Laudato Si': On Care for our Common Home.* Encyclical, May 24, 2015. Retrieved from http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html on 9 May 2017.
[26] Esbjörn-Hargens and Zimmerman, *Integral Ecology, p.* 237.
[27] *Ibid*., p. 236.
[28] Eoin O'Neill, 2016, The Pope and the Environment: Towards an Integral Ecology?, *Environmental Politics*, 25:4, pp.749-754.
[29] Marcelo Sánchez Sorondo and Veerabhadran Ramanathan, 2016, Pursuit of Integral Ecology, *Science*, 352 (6287) , p. 747.
[30] Towards an Integral Meta-Studies, p.174.

Daniel Wahl notes the call from a wide range of disciplines - the social sciences, arts, humanities, and ecological sciences - for a transdisciplinary and integrative approach.[31] Edwards also makes a strong case for scientific big picture inquiry that is able to appreciate and integrate a multitude of perspectives and disciplines that use insights about the plurality of reality, the need to understand the subjective and the objective.[32] The august lineage of the thinkers noted above, which has led to the integrative, integral and integral ecological thought and practice of today - is reason enough to select such methods. This intellectual tradition also underpins my own nascent integral ecological model: the *Integral Policy Triptych* (IPT). The IPT uses EZI as its theoretical and methodological base. It also uses a form of the shorthand that Wilber uses when describing his integral model, which collapses his four *quadrants* of - or perspectives on - reality : subjective, intersubjective, objective and interobjective, into three; being the "I" (subjective), the "we" (intersubjective) and the "Its" (objective and interobjective).[33]

Reflecting the structure of Wilber's shorthand, I collapse EZI's equivalent quadrants, the four "terrains", into the integral environmentally-flavoured democratic framework of *Person* (subjective - EZI's *Terrain of Experiences*), *Polity* (intersubjective - EZI's *Terrain of Cultures*), and *Planet* (objective and interobjective - EZI's *Terrain of Behaviour and Terrain of Systems*). The Person aspect of the IPT (at least the one explored in this thesis) relates to the adoption of a personal integral praxis, which "enacts" an integral ecology. It draws on phenomenological, psychological, contemplative and meditative disciplines and practices, in particular, a phenomenological and transpersonal research approach known as organic inquiry. Hence its association with EZI's *Terrain of Experiences*. The Polity aspect of the IPT focuses on understanding the cultural interactions, communications, and shared meaning that underpins the nation-state or other smaller political units such as electorates or "states" within nation-states. It draws predominantly on an ecological version of critical theory, notably Robyn Eckersley's critical political ecology.[34] Thus its association with EZI's *Terrain of Cultures*. The Planet aspect of the IPT combines objective and interobjective policy approaches, such as the hard sciences, economic and ecological modelling, legislation and regulation, and various disciplines used by policy practitioners. Hence its association with EZI's *Terrain of Systems* and *Terrain of Behaviours*.

The following sections introduce and review Wilber's integral theory and EZI, these forming a theoretical base for my embryonic new integral ecology model. While these sections are reasonably extensive, they seek to orient a reader who may not be familiar with integrative thought, integral theory or the varied integral ecologies. While Wilber's integral concepts are embedded in a large number of his books and other

[31] Daniel C. Wahl, 'Design for Human and Planetary Health: A Transdisciplinary Approach to Sustainability', *WIT Transactions on Ecology and the Environment*, Vol 99, 2006, pp. 285-296.
[32] *Ibid.,* p. 174-176. Also see Mark G. Edwards, 2016, Vygotsky's Warning: General Science and the Need for Metalevel Research, *Mind, Culture, and Activity*, 23:2, pp. 95-107.
[33] Wilber, Introduction to Integral theory and Practice, p.25.
[34] Robyn Eckersley, *The Green State: Rethinking Democracy and Sovereignty,* The MIT Press, London, 2004.

works, it is in *Sex, Ecology, Spirituality* and *Integral Psychology* that the many of the elements of his theories are most cogently presented. However, one particularly important work is Wilber's introduction to integral theory and practice (his Integral Operating System"), which was published in the inaugural issue of the *Journal of Integral theory and Practice*[35]. This paper and the first edition of the journal marks the solid entry of Wilberian integral thought into parts of the academy, and, in terms of peer-reviewed articles, this is a key contribution. However, I also outline some general criticisms of the underlying Wilberian integralism and address these criticisms. The sections also outline the reconstructive postmodern nature of integral theory, and its close engagement with the critical realist metatheory of Roy Bhaskar, hence making a further case for the use of an integral approach as well as integral ecology.

The development of the IPT draws on Wilber's Integral Methodological Pluralism and EZI's corollary: the ecological modes, or "ecomodes",[36] and is based on the examination of studies and research from relevant subjective, intersubjective, objective and interobjective sources. Wilberian integral theory, EZI, and my nascent IPT together are presented as a first attempt to provide an integral meta-studies framework that can be applied to policy, politics and democracy. My aim is to develop a metatheoretical approach - particularly for the Antarctic policy aspects of the IPT - that approximates Edwards' meta-studies method for the social sciences, which:

> i) employs rigorous meta-level building and testing methods to, ii) collect middle-range data from subjective, relational and objective sources, and which iii) develops meaning from this data through the conscious adoption of adequate and relevant interpretive frameworks so that, iv) it can communicate its findings through the articulation of meta-level theories, methods, interpretive frames and data-analytical studies.[37]

In the thesis I attempt to provide for these "four involvements of method, data, interpretation and theory" in the following way: i) method - by an examination of the development of Wilber's integrative thought and an overview of EZI and other integral ecologies (Chapters One and Two), leading to the building of a putative new integral ecology model and method known as the Integral Policy Triptych, consisting of Person, Polity and Planet (Chapter Three); ii) data - by the collation of information from a wide range of subjective, relational (intersubjective) and objective/interobjective sources to underpin and inform each respective component of the IPT (Planet - Chapter Four, Polity - Chapter Five and Person - Chapter Six); iii) interpretation - extracting meaning from the information and data collected through a suggested interpretive framework relevant to policy, politics and democracy (Chapters Three to Seven); and iv) theory - by building the initial skeleton of a meta-level theory that seeks an integral democracy (Chapters Three to Seven). Note that the goal is not just to ensure we have method, data, interpretation and theory, but meta-

[35] Ken Wilber, 'Introduction to Integral theory and Practice: IOS Basic and the AQAL Map.' *Journal of Integral theory and Practice,* 2006, 1(1), pp. 1 – 40; p. 22.
[36] Esbjörn-Hargens and Zimmerman, *Integral Ecology,* p.243. 247-256
[37] Edwards, Towards an Integral Meta-Studies, p.178.

method, meta data analysis, meta-interpretation (i.e. meta-hermeneutics) and metatheory.[38] I will not claim that this is done perfectly and the IPT will need road testing. Indeed like many metatheorists, my own awareness and understanding of meta-methodological issues - along with that of many other integral ecologists - can always be improved.[39]

As Edwards argues, metatheory in the past has generally not had a strong methodological base and therefore has not been viewed as a formal scientific endeavour.[40] In addition, the role of (middle-range) information and data in the building and testing of metatheory has not been apparent, and proponents "typically have not consciously pursued research as a meta-level activity."[41] It is hoped that some of these deficiencies can be avoided in this thesis through the adoption of Edwards' fourfold framework. It should be noted that Wilber's integral theory and other streams of integrative thought are likely to have some of the weaknesses identified by Edwards. In short, this is that "Wilber and many other metatheoreists rely on traditional scholarship methods of essentially reading a broad, but idiosyncratic, selection of writings and research and then making of it what they will according to their own assumptions and predilections."[42] Edwards' more rigorous and scientific approach is contrasted with this more traditional approach to scholarship.[43] Nevertheless, he locates Wilber's metatheory in the aforementioned tradition of big picture building, which by extension would also apply to EZI. Edwards sees Wilber's IMP and Bill Torbert's Developmental Action Inquiry as perhaps the two most detailed examples of integrative meta-methodologies.[44] IMP and EZI (based, as it is, on IMP) and their IPT offspring therefore provide a base scientific methodology for doing this kind of big picture and metatheoretical research.[45] IMP and EZI are theories based on integral paradigms, injunctions and practices.[46] Frank Visser, probably one of Wilber's longest-standing - and often harshest - critic has nonetheless said of him that "the ideas that he has presented deserve to be examined in any academic and social discussions of culture, politics, religion, and mental health."[47]

It is clear from my exploration of Wilberian integral thought, EZI and the host of other integral ecologies, that these approaches are not isolated developments by a few thinkers. Rather, they are key contributions from a long line of integrative thought and metatheorising. Therefore, in the following sections I present them as a given base for my methodology. But I do not assume that my proposed IPT methodology and

[38] *Ibid*., p. 183-187.
[39] Mark G. Edwards, 'Misunderstanding Metatheorizing', *Systems Research and Behavioural Science,* 2014, 31, pp. 720-744.
[40] Towards an Integral Meta-Studies, p. 177.
[41] *Ibid*., p. 178.
[42] *Ibid*., p. 183.
[43] Edwards, M. G, 2008, Evaluating Integral Metatheory, *Journal of Integral theory and Practice*, 2008, 3(4), 61-83.
Edwards, M. G, 2008, Where's the Method to our Integral Madness? An Outline of an Integral Meta-Studies, *Journal of Integral theory and Practice*, 3(2), 165-194.
[44] W.R Torbert, S.R Cook-Greuter, D Fisher, E Foldy, A Gauthier, J. Keeley, *Action Inquiry: The Secret of Timely and Transformational Leadership*, 2004, Berrett-Koehler, San Francisco, CA..
[45] Towards an Integral Meta-Studies. pp. 180-181.
[46] Andre Marquis, 2007, What is Integral theory?, *Counseling and Values*, April 2007, Volume 51, p. 167-168, p. 176
[47] Visser, p.241.

model, or the underpinning theory or methods, are infallible, or indeed the only integrative frameworks available. As Esbjörn-Hargens and Zimmerman note, "it is exciting to see a variety of integral ecologies emerging"[48] and I would echo this view. EZI, however, was a natural framework for me to adopt, being based on Wilber's works. As recounted above, these integral frameworks gave me a way to reconcile and integrate the environmentally-based philosophies and disciplines with which I was familiar through my academic and professional policy background. I believe in this thesis I make a relatively clear case for the adoption of *Person, Polity,* and *Planet* by any political party that wishes to have a robust (and faithful-to-the-base) ecological platform. While the IPT can be fully evaluated only through its implementation in the personal, policy, political and democratic spheres, the methods of Wilber and EZI are built on the collation, collection, synthesis and integration of a colossal range of subjective, intersubjective (relational) and objective/interobjective sources. To develop methodology for each part of the IPT, not only do I present data or information additional to that presented by Wilber and in EZI - particularly that with an "Antarctic" flavour - but wherever possible I propose an integral interpretation of data or information presented; how it is - or may - be integral in its own right or how it can be 'tipped over' into an integral manifestation. Examples I present include Robyn Eckersley's tripartite of 'green' political evolution and her critical political ecology,[49] and John Keane's "unfinished" democracy.[50] My interpretation is that both of these key authors used the intersubjective/"we"/"Polity aspect of the IPT already have an engaged meta-perspective in play; for example Eckersley, through her ecological adaptation of critical theory, which in particular draws on Habermas's three "validity" claims of objective knowledge (it), subjective "aesthetic judgment" or sincerity (I), and "moral-practical insight" or intersubjective justness (we)[51], and which heavily influenced some of Wilber's integrative approaches.[52]

1.3 Areas of Focus: Antarctic policy and politics

One area I believe particularly suited to an integral ecological approach such as the IPT is Antarctic policy and politics. The region is managed under a unique multi-state approach, which clearly introduces greater levels of complexity, due to the sometimes conflicting values, policies and legislative practices of the member (and non-member) states of the Antarctic Treaty System.[53] It is a place where ecological science, policy, politics and democratic approaches to governance are ripe for use in an integrative fashion. It is still seen by many states as a pristine area for science and exploration and, above all, a place of human

[48] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 667.
[49] Robyn Eckersley, *Environmentalism and Political Theory: Towards an Ecocentric Approach*, SUNY Press, Albany, 1992.
[50] John Keane, *The Life and Death of Democracy,* Simon & Schuster UK, London, 2009.
[51] Jürgen Habermas, *Moral Consciousness and Communicative Action*, translated by Christian Lenhardt and Shierry Weber Nicholsen, The MIT Press, Cambridge, MA, 1999, p.4.
[52] Visser, *Ken Wilber*, pp.36-37.
[53] Marcus Harward and Tom Griffiths, (eds), *Australia and the Antarctic Treaty System – 50 years of influence*, University of New South Wales Press Ltd, Sydney, 2011; Christopher C Joyner, 'The Antarctic Treaty and the Law of the Sea: Fifty Years On', *Polar Record*, January 2010, Volume 46(1), pp. 14-17.

cooperation. While this view is the surface one, it hides many complex geopolitical issues that also call for integrative approaches.[54] While many of the methods in the IPT could be generically applied to any area of policy and politics, a particular focus has been placed on Antarctic policy and how integral thought could be applied. Examples will often be drawn from this area of policy during both the introductory method chapters and when I expand upon the IPT in subsequent chapters. In this way it is hoped that a case is made for the methodologies I have taken from integral theory and integral ecology (EZI), through demonstrations of how the methods could be practically applied, and using information from Antarctic science, ecology, sociology, law, policy and politics to meet, as much as possible, Edwards' 'data' injunction. I believe that these examples help to make a solid case for this integrative approach and will help establish the validity of my own integral ecology model: the Integral Policy Tryptic of *Person, Polity* and *Planet*. While some of the data used is Antarctica as seen from the objective and interobjective perspectives, I also not neglect the construction of a broad political and democratic approach to underpin this specific application of the IPT. This takes the form of an integral interpretation of *The Green State* by Robyn Eckersley[55] and *The Life and Death of Democracy* by John Keane, and, in particular, his "monitory" democracy)[56] is designed to provide a broader philosophical base for the ITP that, if in place, would make the implementation of an integral Antarctic policy much more likely.

1.4 Wilber's Integral Theory and the Development of Integrative Thought

The contours and cardinals of the integral map were developed by the American philosopher Ken Wilber. Wilber was born in Oklahoma City, Oklahoma in 1949, and completed high school in Lincoln, Nebraska. Although he began studying medicine at Duke University in North Carolina, his focus soon turned from science to psychology and philosophy. He returned to Nebraska to study biochemistry, but after gaining a major in this discipline he left the formal academic world to begin writing his own books.[57] Wilber's initial contribution to the development of integral theory came through his first published work, *The Spectrum of Consciousness*, which is considered to be one of the founding texts of transpersonal psychology.[58] In the book, Wilber posited that the individual development of humans happens in levels, waves or stages, and that many of the higher stages, while recognised by the Eastern traditions, were not catered for by

[54] Alan D. Hemmings, Klaus Dodds and Peder Roberts, 'Introduction: the Politics of Antarctica', in *Handbook on the Politics of Antarctica*, Dodds, K, Hemmings, A.D, and Roberts, P (Eds), Edward Elgar Publishing, Cheltenham, UK, 2017, pp. 1-17.
[55] Eckersley, *The Green State.*
[56] Keane, *The Life and Death of Democracy.*
[57] *The Biography of Ken Wilber,* http://www.integralworld.net/biography.html; viewed 23 April 2011.
Visser, *Ken Wilber*, p.17-26.
[58] Ken Wilber, *The Spectrum of Consciousness,* Quest, Wheaton, 1977. Note that, unless otherwise indicated, citations from Wilber's books up until 2000 are drawn from *The Collected Works of Ken Wilber,* 1st edn, Shambhala, Boston, (1999 for Volume 1, 2000 for Volumes 2 – 8). For consistency, the title of Wilber's original text will be noted in square brackets after the *Collected Works* reference. Except where noted, all Wilber books cited are from the Collected Works editions.
Visser, *Ken Wilber*, p. 24-26.

mainstream Western approaches to development.[59] Wilber contended that if each psychological stage was navigated successfully and in a "healthy" manner, then the personal self would be able to develop and experience a larger identity that transcended, and yet included, the individual. Although *Spectrum* focused on the development of human consciousness, it contained a key element of integral theory: its developmental aspect, which is similar to that of holism and the various system sciences. Each new stage or level transcends, but includes, the components of its previous stage. That is to say, each new stage has novel or emergent properties that are not only the sum of their parts.[60] The consideration of multiple viewpoints, the bringing together of Eastern philosophy and Western psychology, and inclusivity are core parts of his work.[61] Development is also found within Wilber's works, which Wilber scholars and indeed Wilber himself separate into five distinct and yet overlapping phases.[62]

The Spectrum of Consciousness is "Wilber-Phase 1". He characterizes this as a "romantic-Jungian" phase, where spiritual growth is a complete or partial return to a pre-existing condition. In Phase 2**,** developmental psychology is added to the mix to help integrate Eastern and Western approaches to psychology, and higher spiritual stages or closeness to God only come after certain levels of development are reached. Phase 3 involves a further refinement of his model of development, which he no longer saw as linear or homogenous, but as a complex process, where the self has to navigate through and balance its growth through numerous lines of development (cognitive, emotional, social, spiritual). Phase 4 saw socio-cultural dimensions added to this model of development, as well as the objective physiological processes of consciousness.[63] Thus he arrived at the four quadrants, to which I will return shortly. Though it is beyond the scope of this thesis to provide a full account of the development of Wilber's work, this short summary demonstrates how Wilber moved from a theory of consciousness and development focused on the interior subjective world of the individual to one that also incorporated physiological, cultural and social factors. Wilber also has a fifth phase that he calls "postmetaphysical", which in turn includes these earlier phases, but adds new elements with a different epistemological base. I will return to this phase in due course, as, along with Wilber's Phase 4, it forms much of the foundations of this thesis.

The observation that each new stage or level transcends, but includes, the components of its previous stage is another important aspect of integral theory and is encapsulated in the concept of the *holon*, something that at one stage of development is a whole, but at higher levels is also a part. This recognises the holistic nature of development, where every whole is made up of parts and every whole forms part of a more expansive whole. For example, electrons, neutrons and protons form atoms, which form molecules,

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[59] Ken Wilber, *The Collected Works of Ken Wilber*, 1st Edition, Volume 7, Shambhala, Boston, 2000, p.47, [*A Brief History of Everything*].
[60] *Ibid*.
[61] Visser, *Ken Wilber*, p.1.
[62] *The Five Phases,* http://www.integralworld.net/phases.html, retrieved 24 April 2011.
[63] *Ibid.*
Visser, *Ken Wilber*, pp. 28-29, p. 35

which form proteins and fatty acids, which form cellular structures, which form cells, which form tissues, which form organs, and which form organisms. Within this developmental sequence organisms transcend and include organs, organs transcend and include tissues, and so on. Such hierarchies of development seem to be ever-present in nature. In integral theory, hierarchies are also known as *holarchies*, in order to accurately reflect the holistic nature of reality - that it is composed of holons.[64]

During his research, Wilber noted that there were developmental hierarchies or holarchies in every discipline; "in everything from Marxism to structuralism to linguistics to computer programming."[65] In his attempt to make sense of the differences between these fields and to find a map or type of hierarchy that could connect them all, he drafted and sketched many hundreds of developmental lists and maps covering a range of fields: physics and biology, social and system sciences, psychology, phenomenology and even contemplative mysticism.[66] He initially thought that the maps were just different versions of the *same* hierarchy and struggled to find one overarching basic holarchy to represent them all. Although there were similarities between them, there were also striking differences.[67] Eventually it became apparent to Wilber that there were four different types of holistic developmental sequences, or four *quadrants*.[68] These quadrants all deal with the same reality, but basically describe "the *inside* and the *outside* of a holon, in both its *individual* and *collective* forms."[69] The inside and outside of a holon in its individual form can also be respectively considered as the subjective and objective perspectives of, or domains within, a holon. The inside and outside of a holon in its collective form are respectively labelled as the intersubjective and interobjective views of a holon. Thus we arrive at what Wilber calls the quadrants. The quadrants are the four basic perspectives available to us, the basic realms that make up reality. These are the subjective, objective, intersubjective and interobjective.[70]

Wilber's investigations revealed that each of these perspectives or domains was a different version of the "truth". A truth-claim could have validity and be applicable without being totally "right"; but it needed to be viewed alongside other important truth-claims. One perspective or realm could not be reduced to another.[71] Wilber's path was similar to that of other integral thinkers in that he sought to find a way to integrate the various perspectives and their corresponding research findings. But as Wilber said, this cannot

[64] Ken Wilber, *The Collected Works of Ken Wilber*, 1st edn. Volume 4, Shambhala, Boston, 1999, [*Integral Psychology*], p. 437-444.
Visser, *Ken Wilber*, pp. 182-184.
[65] Wilber, *A Brief History of Everything*, p. 118.
[66] *Ibid*., p. 48.
[67] *Ibid*., p. 118.
[68] *Ibid*., p. 118-119.
Wilber, *Integral* Psychology, pp. 493-496.
[69] Wilber, *A Brief History of Everything*, p. 120, emphasis in original.
[70] Marquis, What is Integral theory?, p.165.
[71] Wilber, *A Brief History of Everything*, p.48-49.

be done “as an eclecticism, or a smorgasbord of unrelated observations. There has to be something resembling coherence and integrative capacity.”[72]

Mark Edwards notes that Wilber is one of many integrative thinkers and traces the development of integrative models and methods partly from the rise of meta-data analysis, which sought to create a big picture to make sense of the proliferation of empirical studies and data in the 1970s and 80s. He notes how this drive to develop and adopt meta-level frameworks and analysis is emerging across a number of disciplines:

> On the theory side we see the emergence of meta-level theoretical frameworks, multiparadigm studies and overarching conceptual models in many social sciences. In the study of scientific research methods we see the development of meta-methods and the associated approaches of mixed and multi-methodologies and with the variety of new epistemological orientations we see the rise of meta-level and general hermeneutics. Together, these overarching forms of analysis constitute a meta-level science and they formalise a way of developing knowledge that has been part of the human story of meaning-making for a very long time.[73]

He outlines the emergence of such meta-level frameworks in systems research, for example, Critical System Theory, which analyses a range of conceptual and methodological models to determine how best to use them together.[74]

Edwards is also at pains to distinguish between the big pictures that developed during the twentieth century (for example, Marxism, monetarism, rational choice theory, marketism, globalism, the "promises of hypertechnologies") and pluralistic metastudies. The earlier big pictures provided great leaps forward in understanding, but also resulted in "ideologies of various kinds that are fundamentally degrading the environmental, social, economic and intellectual resources of the planet."[75] Rather than a big picture that is "specialist, monistic, objectifying and aimed at finding the one true theory or method", Edwards calls for "a deep science which is integrative, pluralistic, reflexive, and appreciative of contending views" and he lays out the structure of a robust integral meta-studies.[76] It is clear that Wilberian integral theory and EZI are significant iterations in a long line of integrative and systems thought. Edwards own "integrative pluralism" is an example of another contemporary approach to metatheorising.[77]

Wilber's integral approach is in this spirit; it includes those kind of integrative and pluralistic elements and provides a framework for understanding how all of these perspectives can be partly right and how they relate to one another. It also describes how the quadrants develop or arise together. This is briefly discussed below, with further exploration of the quadrants and other elements of integral theory. This

[72] Bodhisattvas are Going to Have to Become Politicians’, p.14, cited in Visser, *Ken Wilber,* p.35.
[73] Towards an Integral Meta-Studies, p.175-176.
[74] Edwards, 'Misunderstanding Metatheorizing', p. 725.
[75] Edwards, Towards an Integral Meta-Studies, p.176.
[76] Edwards, Towards an Integral Meta-Studies.
[77] Edwards, 'Misunderstanding Metatheorizing', p. 730.

includes a description of the development of general worldviews held by humans through the ages; the premodern, modern and postmodern periods, and how this relates to Wilber's theory.

1.5 The Quadrants

The Integral map attempts to describe reality as comprehensively as possible by using all the viewpoints or perspectives available to humans, or as Wilber would describe it, understanding the "same territory" by understanding it is composed of "four different territories."[78] As we have seen, these are the insides and outsides of individual or collective holons. So the quadrants are constituted by the intersection of the interior-exterior and individual-collective axes.[79] The quadrants can be summarised using pronouns from the major languages to describe the subjective (interior) and objective (exterior) domains.[80] These are: first person singular (*I*) or plural (*we, us*); second person (*you*); and third person (*he, she, them, it,* or "*its*" – a pluralised version of *it*). Wilber notes that "we" is more accurately described as being first person plural. However, when used in the context of two people or groups communicating, it can mean "we understand each other."[81] First person is singular and subjective and relates to the self and self-expression, arts, aesthetics and beauty. Second person is also subjective, but collective in nature, and hence is more accurately described as intersubjective. It is about how we relate to each other or the inner cultural world that we inhabit. Third person is objective and is hence about objective truth, revealed, for example, by science. This can be science that looks at individual domains, like chemistry and physics (that is, the *it*), or it could be the sciences of collectives, or of systems (the *its*). In integral theory, when using this shorthand description, the objective *it* and interobjective *its* are collapsed into "it", and hence the quadrants become the *I, We* and *It*.[82] This reflects Edwards' 'data' paradigm for metatheorising, which involves the collection of middle-range data from subjective (I), relational (We) and objective (It) sources.[83]

Wilber also labels the *I, We* and *It* as arts, morals and science; the Beautiful, the Good, and the True; or self, culture and nature.[84] The Integral map contains all these domains and thus posits that every phenomenon that occurs contains all these perspectives or realms: thus, "you can look at any event from the point of view of the 'I' (or how I personally see and feel about the event); from the point of view of the 'We' (how not just I but others see the event); and as an 'It' (or the objective facts of the event)."[85] For a truly holistic view and to more fully understand any event, no perspective can be left out. As Wilber notes, "self and

[78] Wilber, *A Brief History of Everything*, p. 118-119.
[79] Marquis, What is Integral theory?, p. 165-167.
[80] Ken Wilber, 'Introduction to Integral theory and Practice: IOS Basic and the AQAL Map.' *Journal of Integral theory and Practice,* 2006, 1(1), pp. 1 – 40; p. 22.
[81] *Ibid*.
[82] *Ibid*.
Visser, *Ken Wilber*, pp. 190-195.
[83] Edwards, 'Towards an Integral Meta-Studies', p.178.
[84] Wilber, 'Introduction to Integral theory and Practice', pp.22-23.
[85] *Ibid*., p.23.

culture and nature are liberated together or not at all."[86] The four quadrants are represented graphically at Figure 1. The upper two quarters or quadrants represent the singular or individual perspective or domain, while the lower two quadrants are the plural or collective.[87] The Left-Hand quadrants represent the inside or interior of an event, while the Right-Hand quadrants represent the outside or exterior of an event. Hence, the Upper-Left quadrant is the subjective (self and consciousness), the interior of an individual, or *I*. The Lower-Left quadrant is the intersubjective (culture or worldview), the interior of a collective, or *We*. The Upper-Right quadrant is the objective (behavioural, the physical, brain or organism), the exterior of an individual, or *It*. The Lower-Right quadrant is the interobjective (social systems, ecosystems), the exterior of a collective, or *Its*. [88]

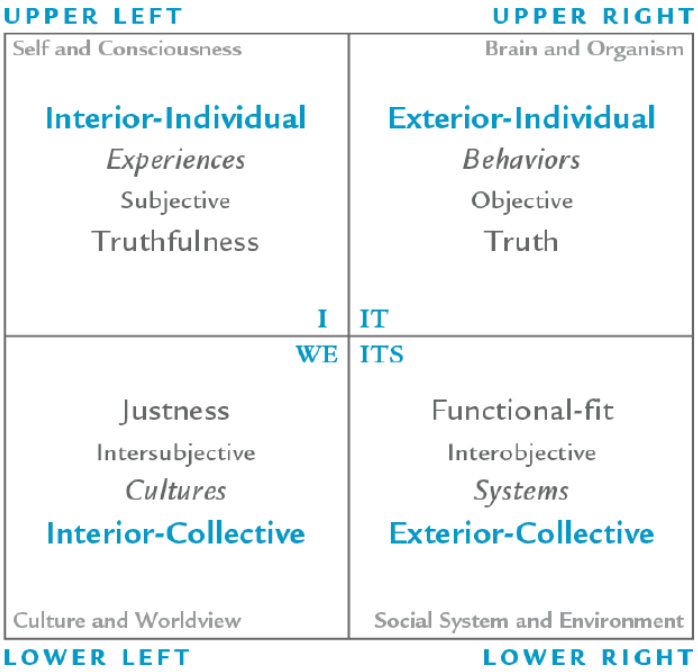

Figure 1. The Four Quadrants (from S Esbjörn-Hargens, 'Integral Ecology. An Ecology of Perspectives', *Journal of Integral Theory and Practice,* 2006, 1(1), pp. 267 – 304; p. 288)

There is additional complexity to the Integral map that goes beyond this model. For example, a recent development by Wilber of integral theory known as Integral Methodological Pluralism doubles the number of perspectives to eight. This approach recognises that each quadrant or holon, regardless of whether it is interior or exterior, individual or collective, can be investigated using disciplines or methodologies that look at the inside or outside of that quadrant or holon.[89] This elaboration of integral theory will be further explored in Chapter Two, as it is an essential part of the methodology of integral ecology. However, the basic framework of quadrants, levels, lines, states and types forms the core of the theory.

[86] *Ibid*.
[87] *Ibid*., pp. 24-26
[88] *Ibid*.
[89] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p.243.

To clarify what each of the perspectives or quadrants may look like, it will be useful to provide an idea of what the quadrants might look like in a bodybuilder lifting a weight, and from the point of view of Antarctic policy. From the exterior or outside we can observe the swelling of the bodybuilder's muscles, increased sweating, deeper breathing, all of which have physiological correlates. This can be described in objective, scientific, third person or "it" language.[90] These parts of the event are purely the individual's response to the exercise as perhaps recorded by an exercise physiologist, so they fall into the Upper-Right quadrant.[91] An Antarctic example of this quadrant would be a dietary study of a Weddell seal.[92] At the same time as the physical or material aspects are occurring in the bodybuilder, in the Upper-Left quadrant we have the individual's subjective thoughts, feelings, and bodily sensations. She may be feeling elation at being able to lift a higher weight, which may then turn into steadied focus as she gets close to the end of the exercise and starts to feel a burning sensation in her arms. All of these feelings and sensations would be described in subjective, first person or "I" language.[93] With regard to Antarctica, the Upper-left quadrant could be used to understand the experience that a visitor to that continent might experience or to compare the views of undergraduate students on environmental management practices in Antarctica.[94]

Every event also involves collective subjective, or intersubjective aspects. For example, the weightlifting It is happening inside a well-defined exercise or gym subculture. The bodybuilder has at least a partly shared worldview with others in the gym, where there is mutual understanding of, or belief in, the benefits of exercise. Other people may watch the bodybuilder and empathize as she grimaces and lifts the weight for the final time, having themselves lifted similar weights before and understanding how it feels. Her focus and efforts may redouble as her training partner provides encouragement. Their intersubjective, shared belief in weightlifting, competitive spirit and faith in its benefits provide extra incentive. This is the Lower-Left quadrant. In terms of Antarctica, this quadrant could be partly revealed through studying the relations within in a group of expeditioners.[95] The counterpoint to the interior cultural aspect of any event is the exterior aspect, or the Lower-Right quadrant. The culture of a gym could be studied from the outside by observing the social interactions between the bodybuilder and other gym members, resulting in an interobjective map of the systems that exist in the gym.[96] Antarctica could be studied from the perspective

[90] Marquis, What is Integral theory?, p. 165.
[91] Wilber, Introduction to Integral theory and Practice, p.26.
[92] Jorge Acevedo, Esteban Carreno, Daniel Torres, Anelio Aguayo-Lobo and Sergio Letelier, 'Cephalopod Remains in Scats of Weddell Seals (Leptonychotes Weddellii) at Cape Shirreff, South Shetland Islands, Antarctica', *Polar Biology*, 2015, 38, pp.1559-1564.
[93] Wilber, 'Introduction to Integral theory and Practice', p.25.
[94]Robert B Powell, Matthew T.J Brownlee, Stephen R Kellert, Sam H Ham, 'From Awe to Satisfaction: Immediate Affective Responses to the Antarctic Tourism Experience', *The Polar Record; Cambridge*, April 2012, 48.2, pp. 145-156; John Peden, Tina Tin, Luis R Pertierra, Pablo Tejedo, Javier, Benayas, 'Perceptions of the Antarctic Wilderness: Views from Emerging Adults in Spain and the United States', The Polar Record; Cambridge, September 2016, 52.5, pp. 541-552.
[95] Antonio Peri, Marta Barbarito, Matilde Barattoni, Ada Abraham, 'The Dynamics and the Interpersonal and Intrapersonal Relations Within an Isolated Group in Extreme Environments**,** *Small Group Research*, June 2000, Vol. 31 no. 3, pp. 251-274.
[96] Wilber, Introduction to Integral theory and Practice, p.25.

of this quadrant through the study of tourism policy, regulatory mechanisms and international law in the region[97] or through a study of complex interactions of climate and ecological systems.[98]

So when we see the bodybuilder lift her weights, or when we investigate what might be causing environmental degradation in Antarctica, which explanation of events is correct? Integral theory says that all of them are partly right and to fully understand any event that we need to take all of them into account.[99] In the same way, Raiman Panikkar notes that reality is pluralistic and therefore so too is truth [100], The common shorthand for an Integral approach or an Integral analysis is *AQAL*, or *All Quadrants, All Levels, all lines, all states, all types*.[101] As previously noted, each quadrant contains levels, lines, states and types. If the four quadrants are considered without including the consideration of levels, lines, states and types, the AQAL analysis is not comprehensive. I will begin my description of these elements by examining the important distinction between states and levels, using examples from the Upper-Left quadrant, which is the subjective self or consciousness.

1.6 States

States are phases that may emulate certain levels or stages of development, but which are transient. They can be temporary physical states like chemical reactions or weather. Although Wilber stresses that we should not mistake the Integral framework with reality itself, as it is "just a map… not the territory,"[102] many elements of the Integral model are readily available in our own awareness. This means we already have a natural compass to navigate the Integral map. Therefore, one of the easiest ways to explain the *states* of integral theory is to use examples that resonate with our everyday experience, or can at least be readily understood or imagined. States can mirror certain developmental stages, but they do not persist, and generally only become permanent through development or evolution. The states of consciousness (subjective self) that most people are familiar with include waking, dreaming and deep - or dreamless - sleep. However, there are other states of conscious that we may have experienced directly or have heard about third-hand. These include meditative states (through meditation, contemplation), altered states (through drugs or other methods), and peak experiences (for example, from travelling in the wilderness).[103] Some authors divide these into 'natural' and 'altered' typologies, but the key thing is that they are temporary and to become permanent require contemplative practices or other yogic disciplines.[104]The peak

[97] Susan J Lewis, *Antarctic Tourism and Environmental Policy: Policy Shortcomings and Suggested Responses*, Unpublished Ph.D. dissertation, University of Delaware, Delaware, 2015.
[98] Stefanie Kaiser, *et al.,* 'Patterns, Processes and Vulnerability of Southern Ocean Benthos: A Decadal Leap in Knowledge and Understanding', *Marine Biology*, 2013, 160, pp. 2295-2317.
[99] *Ibid*.
[100] Panikkar, R, The Pluralisms of Truth. *World Faiths Insight*, 1990, 26, 7-16. Retrieved from *www.dhdi.free.fr/recherches/horizonsinterculturels/articles/panikkarpluralism.pdf* on 20 May 2017.
[101] AQAL is pronounced as '*ah*-qwul'; Wilber, 'Introduction to Integral theory and Practice', p.21.
[102] *Ibid*., p.3.
[103] *Ibid*., p.4.
[104] Marquis, What is Integral theory?, p. 174.

experiences I have had, which I alluded to in the introductory section, are an example of such a state. It occurred while out on a starry night after doing a day of ecological research in the Tasmanian Wilderness World Heritage area in Australia.[105] When considering any particular phenomenon, its state (whether of consciousness, physical or otherwise) may not have a great bearing on the outcome, but it should always be considered to provide a comprehensive picture.[106]

1.7 Levels or stages

Wilber makes the important point about states, and states of consciousness that they are temporary: "they come and go."[107] A meditating monk or a wilderness walker undergoing a peak experience will eventually return to a normal waking state of consciousness, which itself will be maintained for a period of time and then give way to other states, such as dreaming or deep dreamless sleep. On the other hand, "levels" of development do not come and go. They are, more or less, permanent, [108] albeit arbitrary stages that arise in each quadrant in a hierarchical fashion. In integral theory, hierarchical development is also called holarchical, as at each level a new holon emerges, something that is a whole and also a part. Thus, sustained meditative or other practices may lead to a person having permanent, or at least much more frequent, access to such awareness. An understanding of the levels or stages is essential to grasping Integral theory, as it is, at its core, a developmental theory. Within each of the quadrants we have growth or development. Although there are definable points where new properties emerge that were not present at an earlier stage, we do not say that one stage or level is necessarily better than another, or that these stages are rigid or set in stone. Rather, it is more constructive to imagine them as "waves" of development or unfolding.[109] What we can say is that each successive stage, level or wave is more inclusive, more encompassing. Each stage "represents a level of organization or a level of complexity."[110] In terms of the Upper-Left quadrant, a number of models have been put forward to describe the development of individual consciousness, and any number of these can be used within the Integral framework, depending on the phenomenon or problem one is trying to describe or solve[111] (these include the developmental theories and methods of Jane Loevinger[112], Susanne Cook-Greuter[113] and Robert Kegan[114]).

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[105] Brad Arkell, 1995, *Small Mammal Secondary Succession in Buttongrass Moorlands.* Unpublished MSc thesis, University of Tasmania, Hobart.
[106] Wilber, 'Introduction to Integral theory and Practice', p.5.
[107] *Ibid*.
[108] *Ibid*.
[109] *Ibid*., p.27.
Marquis, What is Integral theory?, p.168.
[110] Wilber, 'Introduction to Integral theory and Practice', p.6.
[111] Wilber, *Integral Psychology*, pp.471-478.
[112] Jane Loevinger, *Paradigms of Personality*, Freeman Publishing, New York, 1987.
[113] Susanne Cook-Greuter, *Postautonomous Ego Development: A Study of Its Nature and Measurement*. Unpublished doctoral dissertation, Harvard University, 1999.
Susanne Cook-Greuter, 'Maps for Living: Ego-Development Stages from Symbiosis to Conscious Universal Embeddedness', in: M.L. Commons, C. Armon, L. Kohlberg, F.A. Richards, T.A. Grotzer, & J.D. Sinnott, (Eds.), *Adult Development, 2, Models and Methods in the Study of Adolescent and Adult Thought*, Praeger, New York, 1990, p. 79-104.
[114] Robert Kegan, *The Evolving Self: Problem and Process in Human Development*, Harvard University Press, Cambridge, MA, 1982.
Robert Kegan, *In Over Our Heads: The Mental Demands of Modern Life*. Harvard University Press, London, 1994.

The American psychologist Lawrence Kohlberg posited that the evolution of moral reasoning in individuals passes through three general waves of development, which can be split into six stages.[115] The first wave is the preconventional, or egocentric, and is often associated with young children. Individuals at this level have not yet absorbed the ethics, the rights and wrongs, of their society. The morality of any action is weighed by the direct outcome of that action, particularly the direct consequences, or how the outcome meets the individual's needs and interests. Once the child has adopted the norms of its culture it moves into the conventional or ethnocentric stage. Individuals at this level weigh the morality of an action against society's conventions and are likely to accept and follow these rules and conventions regardless of how it may benefit them personally. This level of moral reasoning focuses on one's own cultural group and tends to exclude concern for those outside the group.[116] The next wave of development is the postconventional. At this level, there is an increased understanding that the individual is, in a sense, separate from society. There is a realization that one's own views may be more important than those of society. This appears to be overly individualistic and in some ways could be mistaken for a preconventional view. However, individuals with an advanced postconventional view do not only have concern for their own cultural group, but "the individual's identity expands once again, this time to include a care and concern for all peoples, regardless of race, color, sex, or creed, which is why this stage is also called *worldcentric*. Thus, moral development tends to move from 'me' (egocentric) to 'us' (ethnocentric) to 'all of us' (worldcentric)."[117]

There is a great deal more detail in Kohlberg's theory that could usefully illustrate development in one of the quadrants; however, this is a simple example of the developmental structure inherent in integral theory. I will return to some of the finer structure of Kohlberg's theory later, as it has a particular bearing on the evolution of an ecological or integral state. However, before we move on to the other elements of integral theory, it is useful to point out that, although many higher *states* of consciousness may be temporarily available to us, the higher *stages* of consciousness do not become permanent without continual learning and practice. Wilber notes: "you can have a peak experience of higher states, because many of them are ever-present. But you cannot have a peak experience of a higher stage, because stages unfold sequentially. Stages build upon their predecessors in very concrete ways, so they cannot be skipped: like atoms to molecules to cells to organisms, you can't go from atoms to cells and skip molecules."[118] The divisions of preconventional, conventional and postconventional or egocentric, ethnocentric and worldcentric, are useful as they can be used to describe stages or waves in the development of other human capacities, intelligences, aptitudes or "lines", which I will return to in due course. Wilber draws much of his conception of the self-stages from the more contemporary work of

[115] Lawrence Kohlberg, *The Psychology of Moral Development*, Harper and Row, San Francisco, 1984.
[116] Wilber, 'Introduction to Integral theory and Practice', p. 7.
[117] *Ibid*., emphasis in original.
Visser, *Ken Wilber*, pp. 186-190.
[118] *Ibid*., p. 12.

Kohlberg Loevinger, and Cook-Greuter, but also notes the influence of pioneering theorists in development such as James Mark Baldwin, John Dewey, G.H Mead, C. Cooley, Anna Freud, Heinz Werner, Edith Jacobson, Harry Stack Sullivan, Heinz Hartmann, Rene Spitz, Erich Neumann, Edward F. Edinger, Clare Graves and Erik Erikson.[119]

A number of other authors have adopted a developmental, level-based, and integral approach to address environmental and sustainability challenges, and have demonstrated the efficacy of such approaches. For example Simon Divecha and Barrett Brown use the constructive developmental theory[120] encased within integral theory and refer to it as *action logics*, which "describes stages of discrete meaning-making, where orders of development unfold in a specific sequence, each transcending and including concepts and cognition internalised at the preceding stage."[121] Their action logics draws on the work of Cook-Greuter[122],Torbert[123] and others.[124] Action logic stages express affect reasoning and behaviour in different ways and there are strong indications that the discrete stages are likely to have an important influence on the behaviour of leaders with regard to environmental and sustainability issues. They note that those applying integral thought are likely to make assessments of other peoples' action logics to help develop positive and sustainable outcomes. By proposing a model that associates action logics with statements or interactions with others on sustainability, Divecha and Brown provide a more structured framework for these kind of assessments, not just for the individual subjective perspectives but also collective ones as well.[125] They point out that their initial research requires further work to create a more tightly validated metric, but also note that the power of the action logics power is achieved through facilitating improved sustainability interventions. Given the "growing body of evidence that understanding developmental perspectives assists us to generate better organizational or group outcomes", it is clear that the creation of such rigorously tested developmental models is likely have increased relevance to integrative or integral approaches to environmental policy and sustainability politics.[126]

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[119] Wilber, *Integral Psychology*, pp. 471-476.

[120] Constructive-developmental theory, or adult stage development, investigates how people interpret experience and how this construction of experience changes and becomes more complex over time. See Sharon L. Spano, 'Constructive-Developmental Theory and the Integrated Domains of Wisdom', *Integral Review*, March 2015, Volume 11, No. 2., pp. 36-74., p. 43.

[121] Simon Divecha and Barrett C Brown, 'Integral Sustainability: Correlating Action Logics with Sustainability to provide Insight into the Dynamics of Change', *Journal of Integral theory and Practice*, 2013, 8(3&4), pp. 197–210, p. 198.

[122] Cook-Greuter, *Postautonomous Ego Development*; See also S.R. Cook- Greuter, 'Making The Case for a Developmental Perspective', *Industrial and Commercial Training*, 20014, 36(6&7), p. 275.

[123] W.R Torbert, S.R Cook-Greuter, D Fisher, E Foldy, A Gauthier, J. Keeley, *Action Inquiry: The Secret of Timely and Transformational Leadership*, 2004, Berrett-Koehler, San Francisco, CA.

W.R Torbert, *Managing the Corporate Dream: Restructuring for Long-Term Success*, Dow Jones-Irwin, Homewood, IL, 1987.

[124]D Fisher, K Merron, W.R. Torbert, 'Human Development and Managerial Effectiveness', *Group & Organization Studies*, 1987, 12, pp. 257-273; T.J O'Fallon, 'The Collapse of the Wilber-Combs Matrix: The Interpenetration of the State and Structure Stages.' Paper presented at the 2010 Integral theory Conference, Retrieved 11 May 2017 from *www.pacificintegral.com/docs/statestagesofallon.pdf*

[125] Divecha and Brown, 'Integral Sustainability', p. 198.

[126] *Ibid*., p. 206.

How do we navigate our way through these developmental stages? Gary Hampson and Matthew Rich-Tolsma suggest that a transformative learning approach is required to move individuals and societies away from the predominant late modernism worldviews that are the main causes of climate change to worldviews based on reconstructive postmodernism, which is based on the principle of complex integration.[127] Reconstructive (post) postmodernism, and its preceding stage, deconstructive (relativistic) postmodernism both require the deconstruction of numerous constructs and concepts, but a reconstructive postmodernism recognises that the deconstruction should not render impossible the reconstruction. Integral theory is in accord with this "new unity of scientific, ethical, aesthetic, and religious intuitions... a creative synthesis of modern and premodern truths and values."[128] They use the term 'transformative learning' which was defined by Jack Mezirow[129] as when learning occurs via a prior interpretation that is used to construe a new or revised interpretation of experience to guide future action, leading to "a transformation in one of our beliefs or attitudes (a meaning scheme), or a transformation of our entire perspective ("habit of mind").[130] Not only do Hampson and Matthew Rich-Tolsma call for this developmental approach they also identify the need for complex integration of existing paradigms via an integral - or 'post-postmodern' approach.[131] Others promote alternative leadership development approaches, such as the immunity to change process[132] and Otto Laske's Dialectical Thought Form Framework[133], which draws on Roy Bhaskar's "four moments of dialectic."[134]

Divecha and Brown's approach to sustainability leadership and cognitive development can be complemented by constructive developmental theory that integrates wisdom theory. Work by Sharon Spano using a combination of developmental research methods and wisdom studies to assess the stage of development of a number of executive leaders and their understanding of wisdom across a number of domains (cognitive, reflective and affective) showed how wisdom was - contrary to much research in constructive developmental theory- not necessarily associated with post-conventional stages of development. Rather, it was demonstrated at each stage of development, whether conventional or post-conventional.[135] This suggests that wisdom may fall into its own 'line' of development, and while it may

[127] Gary P. Hampson and Matthew Rich-Tolsma, 'Transformative Learning for Climate Change Engagement: Regenerating Perspectives, Principles, and Practice,' *Integral Review*, September 2015, Vol 11, No. 3, pp. 171-190.
[128] D.R Griffin, 'Introduction to SUNY Series in Constructive Postmodern Thought'. In C. Keller & A. Daniell (Eds.), *Process and Difference: Between Cosmological and Poststructuralist Postmodernisms.* (pp. vii-xi). Albany, NY: State University of New York Press, 2002, pp.ix-x.
[129] Jack Mezirow, J. *Learning as Transformation: Critical Perspectives on a Theory in Progress*, Jossey-Bass, San Francisco, CA, 2000.
[130] Sharan B. Merriam, Rosemary S. Caffarella and Lisa M. Baumgartner, *Learning in Adulthood: A Comprehensive Guide,* Jossey-Bass, San Francisco, CA, 2007.
[131] Hampson and Rich-Tolsma, 'Transformative Learning for Climate Change Engagement, p.180-181.
[132] Jonathan Reams, 'Immunity to Change Revisited: Theoretical Foundations for Awareness Based Practices for Leadership Development', *Integral Review*, January 2016, Volume 12, No.1, pp. 65-110.
[133] Otto Laske, 'Laske's Dialectical Thought Form Framework (DTF) as a Tool for Creating Integral Collaborations: Applying Bhaskar's Four Moments of Dialectic to Reshaping Cognitive Development as a Social Practice, *Integral review,* September 2015, Volume 11, No. 3, pp. 72-92.
[134] Roy Bhaskar, *Dialectic: The Pulse of Freedom*, Verso, London, UK, 1993.
[135] Spano, 'Constructive-Developmental Theory and the Integrated Domains of Wisdom', pp.68-69.

express itself differently at each stage, it is not an attribute confined to higher levels of development. This type of healthy 'horizontal' development is explored briefly in Chapter 2.

1.8 Lines and Types

Spano's proposal of a 'line' of wisdom development or similar lines of development deserve further discussion, as lines and 'types' are key parts of Wilber's integral theory. Howard Gardner has posited that there are “multiple intelligences”, not just the basic cognitive description or IQ that many people would recognise. These other types of intelligence include emotional, musical, kinaesthetic and others.[136] In integral theory, these various types of attributes are called developmental “lines”, and are described as cognitive, interpersonal, moral, emotional, and aesthetic intelligences or abilities.[137] A person can have great skill or ability in one or more areas, but may be lacking in others. Developmental lines include cognition, self-identity, object relations, morality, role taking, psychosexuality, emotion or affect, creativity, aesthetics, altruism, interpersonal, spiritual, values, needs, and worldviews[138] Someone with a preconventional or egocentric level of emotional intelligence is concerned mostly with himself or herself, with survival, self-preservation. A person with a conventional or ethnocentric level of emotional intelligence goes beyond the “me” to the “us”, and is able to form close emotional bonds with family, friends, the wider tribe or whole country.[139] Those with a postconventional emotional intelligence have the ability to extend their caring beyond their nations to “include all human beings and even all sentient beings in a worldcentric care and compassion.”[140] Similarly, as I have already described, a person’s level of development in moral intelligence or reasoning would reflect how they judge the morality of any action. Further, the way in which this moral intelligence is expressed can depend upon the “type” of moral intelligence.

Types - or personality typologies or ways of being-in-the-world - describe a particular class of state, level, or line. Examples include types as described by a person's type—as described, for example, by the five-factor model,[141] the Myers-Briggs Type Indicator,[142] the Enneagram[143] and Adlerian personality priorities.[144] They can be present at almost any stage or state of development. Some of the other common types include “masculine” and “feminine”.[145] For example, Carol Gilligan found that during the development of moral

[136] Howard Gardner, *Frames of Mind: The Theory of Multiple Intelligences*, Basic Books, New York, 1993.
[137] Wilber, *Integral Psychology,* pp. 460--464.
[138] Marquis, 'What is Integral theory?', p. 171.
[139] Wilber, 'Introduction to Integral theory and Practice', p. 9.
[140] *Ibid*.
[141] R. R McCrae and P. T Costa, 1996, 'Toward a New Generation Of Personality Theories: Theoretical Contexts for the Five-factor Model', in J. S. Wiggins (Ed.), *The Five-Factor Model of Personality: Theoretical Perspectives.* New York: Guilford Press.
[142] K. C Briggs and I. B Myers, 1977, *Myers-Briggs Type Indicator.* Palo Alto, CA: Consulting Psychologists Press.
[143] D.R Riso and R. Hudson, 1999, *The Wisdom of the Enneagram.* New York: Bantam.
[144] K Fall, J. M Holden and A Marquis, 2004, *Theoretical Models of Counseling and Psychotherapy.* Minneapolis, MN: Brunner-Routledge.
[145] *Ibid*., p.13.

reasoning, these types manifest themselves in different ways.[146] Gilligan noted that men and women both progress through three or four stages of moral development. As noted above, these first three stages are preconventional, conventional and postconventional. Gilligan also posited a fourth stage, known as integrated, to which I will return below. Gilligan found that while the egocentric, ethnocentric and worldcentric stages had common elements in both sexes, the expression of this progression tended to differ between males and females. That is, each sex tended to develop its own *type* of moral logic or reasoning; a "different voice"[147]:

> Male logic, or a man's voice, tends to be based on terms of autonomy, justice, and rights; whereas women's logic or voice tends to be based on terms of relationship, care, and responsibility. Men tend toward agency; women tend toward communion. Men follow rules; women follow connections. Men look; women touch. Men tend toward individualism, women toward relationship.[148]

It should be emphasised that these are *tendencies* in the sexes. There is no reason why a man could not develop with a predominantly feminine moral logic or vice versa, or an individual have an almost even balance of masculine and feminine moral reasoning, although it is usually the case that one type predominates. However, at Gilligan's stage four of development, the male and female moral reasoning undergo a joining that sees an integration of "autonomy and relationship, rights and responsibilities, agency and communion, wisdom and compassion, justice and mercy, masculine and feminine."[149] This does not mean that the moral reasoning becomes androgynous, but that even while acting predominantly from one type of logic, the person is aware of and able to use both approaches.

These typologies are not to be used to pigeonhole people into rigid stereotypes. Rather, they provide a useful explanation for a suite of human behaviours. They also expand the scope of integral theory, as they may help to account for different manifestations of behaviours by people who are at the same wave or stage of development. They are also useful for understanding different approaches to ecological theory, such as ecofeminism, which I will explore further below. Importantly, the types should not be decontextualized. That is, they need to be placed within the rich matrix of the Integral map, which can help to account for the differences in type through identifying the biological, social and cultural impacts on an individual. This is another important reminder that the Integral map itself is just an objective, third-person construct; a cognitive guide to the Kosmos. But using it forces us to include as many perspectives, as many states, stages, lines and types of development as possible when we are describing any phenomenon or problem we are trying to solve. Integral theory insists that values and facts, the subjective and the objective, the individual and collective, be considered, and that the hierarchical nature of each of these perspectives be understood and honoured as much as possible. By considering all quadrants, all states, all

[146] Carol Gilligan, *In a Different Voice: Psychological Theory and Women's Development*, Harvard University Press, Cambridge, MA, 1982.
[147] Gilligan*, In a different voice*, p.2.
[148] Wilber, 'Introduction to Integral theory and Practice'*,* p. 14.
[149] *Ibid*., p.16.

levels, stages or waves of development, and all of the lines and types of development, a framework for integrating the realms of fact and value emerges.

1.9 Criticism of Wilberian integral theory

1.9.1 Criticism of developmental stages and brief notes on materialism

Wilber's work is premised upon the existence of distinct stages and there are critics of this approach, some arguing that it has been discredited by various psychologists.[150] However, development and evolution is at the base of all his work, and while he clearly supports an adaptation of the perennial philosophy, he has drawn much of his developmental framework from much-respected developmental philosophers and psychologists such as Jean Piaget, Cook -Greuter, Kegan and Loevinger.[151] In this way, Wilber is in the school of thought of developmental psychologists who believe individuals advance through a series of qualitative stages, as opposed to the other psychological school of thought which sees development as a quantitative increase in knowledge.[152] However, as Visser notes, to explain how this development actually occurs, Wilber does not use Piaget's approach of discrete biological stages or the cognitive science approach, which sees systems as purely processors of information. Rather, and particularly in his earlier works, he uses the metaphysical approach of the perennial philosophy, and the stages of development are more closely aligned to the dimensions or planes in that philosophy, the higher encapsulating the lower and showing qualitative differences.[153] This reliance on the perennial framework as a "pre-given" to explain the nuances of a complicated developmental process could be seen as a weakness. However, Wilber does not discount either Piaget's biological approach or that of other developmental psychologists as there is value in a multitude of perspectives. As previously noted, he credits the influence of a wide range of developmental theorists.[154]

The discipline of philosophy of development broadly defines development as a process of incremental change, with the emergence of a number of qualitative stages, each emerging from the necessary condition of the prior stages.[155] These stages are "reconstructed" through an analysis of events that have already occurred. The philosophy of development also aims to integrate three broad steams of developmental thought: mechanistic cognitive science, which focuses on physics and the processing of information (quadrants of objective/interobjective or behaviours/systems); organismic models, which have a biological base and view development as having (at least biological) importance (again, objective/interobjective-

[150] Visser, *Ken Wilber,* pp.12-13, p. 258.
[151] *Ibid.,,* pp.71-76, p.245.
[152] *Ibid.,* p.257.
[153] Ibid., p.259.
[154] Wilber, *Integral Psychology*, pp. 471-476.
[155] Visser, *Thought as Passion*, p.260.

behaviours/systems); and the narrative/contextualism approach, which interprets development as a "life story" related to its human meanings and value (subjective/intersubjective - experiences/culture).[156] In this sense, the philosophy of development has at least the components of a partly integrative approach. Mark Antley takes this further and uses general systems theory to develop an integrative framework for the three streams of developmental thought, by demonstrating how the frameworks in each stream can be interpreted in terms of systems theory.[157] He recognizes that each stream has value in describing and explaining reality, whether that stream uses the reductionist analysis of mechanism, or the holistic analysis of organicism and contextualism, and he entreats us to "dispense with the simplistic notion of a single, ideal developmental trajectory and embrace the rich complexity of the phenomenon of human development."[158] Like Wilber's integral model, the philosophy of development emphasizes "the distinction between the logic of a model and the dynamic of a model. The *logic* of a model describes the various stages as a strictly linear sequence. The *dynamic* of a model examines how development actually occurs in reality. Since no one develops precisely according to the book, the dynamic aspect of the developmental process is also worthy of study."[159] This mirrors Wilber's defense of the linear nature of the integral model, which he says is "just a map… not the territory."[160] Many of the earliest critics of Wilber's work and his developmental model were from within the field of transpersonal psychology, for example Stanislav Grof and Michael Washburn.[161] Their approach was one of depth psychology, where spiritual development is seen as a return to a "state of unconscious union with the spiritual Self."[162] For Wilber, while there is space in his developmental framework for a 'body' based prepersonal stage (which can 'look' like the spiritual Self when preconscious experience is 'relived' and interpreted), this higher spiritual self is only reached through a process of development. In that sense his is a height psychology rather than a depth psychology as posited by Grof and his ilk.[163]

As Frank Visser notes, Wilber's integral approach is premised on the idea of subjective and intersubjective dimensions and on development or evolution in each of those dimensions. Unless these aspects can stand up to scrutiny, the entire edifice falls.[164] However, Visser examines some of the scientific views on consciousness, which reduce subjective experience to neurological and biochemical processes. Drawing on the work of the philosopher Huston Smith[165] he concludes that "if only if only a materialist answer is

[156] *Ibid*., p.261.
[157] Mark W Antley, 2010, Toward a Metatheoretical Integration of Developmental Paradigms, *Integral Review*, July 2010, Volume 6, No. 3, pp.175-189.
[158] *Ibid*., p.186.
[159] Visser, *Ken Wilber*, pp. 261-262.
[160] Wilber, 'Introduction to Integral theory and Practice', p.3. Visser, p. 285.
[161] Visser, *Ken Wilber*, p.267-271.
[162] *Ibid*., p. 271.
[163] *Ibid*., p.271-273.
[164] *Ibid*., p.244.
[165] Wilber takes many of his perennialist labels and metaphors from Smith's works, for example the terminology of the four great links of the great Chain of Being (body, mind, soul, spirit). See Visser, p.244, pp. 248-249 and Huston Smith, *Forgotten Truth: The Primordial Tradition*, Harper and Row, 1976. Unlike the perennialists, Wilber has more respect for modern Western culture, which

acceptable, materialism is begging the question, since it claims that the individual is a material being because materialism is the only acceptable point of view."[166] The use of sensory perception as the key source of scientific knowledge is fine for the physical sciences as visible matter is what those sciences seek to study. But, for those disciplines seeking to study and understand subjective experiences - or interiors - such an approach is "disastrous", and "there is as yet not one materialist theory of consciousness that does justice to subjective human experience." [167] However, it is worth noting that Wilber has continually increased the space in his theories that is allocated to the objective and interobjective. The exterior physical and the interior interpretive run in concert; while the interior cannot be reduced to physical processes alone, each quadrant arises together and each leaves its mark on the other.[168] This arising of the four quadrants or dimensions of reality is what is called in EZI a tetra-arising or the "tetra-mesh."[169] The other criticism apart from the hard or materialist science one is the rejection of hierarchies, and some of the more extreme forms of postmodernism.

1.9.2 Hierarchies and holarchies

In *Sex, Ecology, Spirituality* Wilber notes that hierarchical and developmental concepts are under fire from a range of sources and that: “all sort of theorists, from deep ecologists to social critics, from Ecofeminists, to postmodern poststructuralists, have found the notion of hierarchy not only undesirable, but a bona fide cause of much social domination, oppression and injustice.”[170] The response to this dislike of hierarchies, particularly in the area of government and governance, has been the proposition to adopt a *heterarchy.* This is based on an egalitarian model where there is equal interaction between, and equal importance of, elements, as opposed to a hierarchy, where some elements are more “important” or have more influence than others.[171] I will later address the criticisms of hierarchy, noting that many of these criticisms are valid, but also explaining why heterarchies have a very important part to play in integral theory.

On the other hand, hierarchies, or at least a modified version that describes their true nature, are an essential component of integral theory. This is because the theory, at its core, is developmental or

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the perennialists tend to view as degenerate and materialistic. They view premodern/prescientific times as more balanced and spiritual. Wilber has similar criticisms of western superficiality, but as with his ideas of personal development, he does not support the idea that premodern/prescientific cultures were more spiritual than at present - rather that cultural evolution brings a greater awareness and ability to access spirituality. hence he terms hi approach 'neo-perennial'. See Visser, p. 277.

[166] Visser, p.249.

[167] *Ibid*.

[168] *Ibid*., p.251.

[169] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 183. Corey de Vos defines tetra-mesh as "The act whereby a holon meshes or fits with the selection pressures (i.e., the validity claims) of all four quadrants. In order to tetra-mesh, each holon must, to some degree, be able to register its own exterior accurately enough (truth), its own interior accurately enough (truthfulness), understand its cultural milieu (mutual understanding), and fit within its social system (functional fit). Also referred to as tetra-enactment or tetra-evolution, meaning that all four selection pressures must be dealt with adequately in order for a holon to evolve." See https://integrallife.com/glossary/tetra-mesh/, accessed 7 may 2017.

[170] Ken Wilber, *The Collected Works of Ken Wilber*, 1st edn. Volume 6, Shambhala, Boston, 2000, p. 23. [*Sex, Ecology, Spirituality: The Spirit of Evolution*].

[171] *Ibid*., p. 24.

evolutionary in nature. Modern evolutionary theory and systems sciences recognise the importance of hierarchies in self-organising systems.[172] It is worth mentioning in passing that many of the ecophilosophies with an aversion to hierarchy are actually grounded in a systems science, web of life, everything-is-connected approach.[173] While these philosophies provide a vital perspective, they need to be placed within a wider Integral framework. Part of this framework involves a reworking of the concept of hierarchies into holarchies, and the concomitant renaming of the constituent elements or parts of a hierarchy into holons.

Arthur Koestler coined the term holon, which refers to something that at one level or stage of development is considered a whole, but at another level is considered a part. [174] This reflects the holistic nature of development, as in any evolutionary progression or sequence: "what is whole at one stage becomes a part of a larger whole at the next stage."[175] That is, every whole is made up of parts, and every whole forms part of a more expansive whole. For example, electrons, neutrons and protons form atoms, which form molecules, which form proteins and fatty acids, which form cellular structures, which form cells, which form tissues, which form organs, which form organisms, and so on. A cell is a whole, but is also part of larger wholes; it is a holon. The cell has constituent parts: cellular structures or organelles. But the organelles are also wholes, being made up of parts: proteins, fatty acids and DNA. So we have parts/wholes, or holons, at every level or stage. A normal hierarchy then, is an "order of increasing holons, representing an increase in wholeness and integrative capacity."[176]

Unless there is an underlying organising principle that arranges parts into greater wholes and which provides emergent properties that the parts alone do not have, then "you have heaps, not wholes."[177] The processes that create holons are interdependent and there are complex interactions between them. However, hierarchies are asymmetrical; the evolution or development itself is unidirectional. That is, atoms form cells, which form organs and so on. It does not happen in reverse. As Wilber puts it "[a]corns grow into oaks, but not vice versa."[178] Although hierarchies are sometimes represented in a linear fashion to simplify them, this belies the underlying complexity and they are often pictured as a series of nested circles or spheres, each representing a particular stage or level.[179] The holons at the higher stages are also *more* holistic, as they are made of a greater number and type of holons.

Within some hierarchies, a type of control or influencing mechanism operates. For example, holons at a lower level may exert an influence on higher levels, but they in turn are more strongly influenced by higher,

[172] *Ibid*., p. 23.
[173] *Ibid*., p. 13-14.
[174] Arthur Koestler, *The Ghost in the Machine*, Random House, New York, 1976.
Visser, *Ken Wilber*, pp. 182-184.
[175] Wilber, *Sex, Ecology, Spirituality*, p. 25.
[176] *Ibid*., p. 26.
[177] *Ibid*., p. 24.
[178] *Ibid*., p. 27.
[179] *Ibid*., p. 26.

more inclusive holons.[180] On the other hand, *inside* any one particular level, the constituent holons work by a form of heterarchy, where:

> no one element seems to be especially more important or more dominant, and each contributes more or less equally to the health of the whole level … [b]ut a higher-order whole, of which this lower-order whole is a part, can exert an overriding influence on each of its components. Again, when you decide to move your arm, your mind – a higher-order holistic organization – exerts influence over all the cells in your arm, which are lower-order wholes, but *not vice versa*: a cell in your arm cannot decide to move the whole arm – the tail does not wag the dog.[181]

Hence, between levels or stages is hierarchy and, within a level, heterarchy. As a new holon comes into being, it encompasses the abilities or functions of its constituent holons, but also has its own special or emergent capacities.[182] Thus, the new holon could be envisaged as being "higher" or "deeper", by virtue of a vertical integration that is not seen within a heterarchy.[183] A central tenet of developmental studies, and hence of integral theory, is that when a new stage is reached, it includes all of the important values of the previous stage, but also contains emergent or new values. This 'something extra' or 'extra value' is considered to be "*relative* to the previous (and less encompassing) stage."[184] Each level or stage in a hierarchy is "adequate and valuable" in its own right, "but each deeper or higher stage is more adequate and, in that sense only, more valuable (which always means more holistic, or capable of a wider response)."[185] Therefore, as hierarchies consist of holons, Koestler noted that they should more accurately be described as *holarchies.*[186] This is a useful term, particularly if it is juxtaposed with what could be called an unhealthy or "pathological" hierarchy. The latter type of developmental unfolding is what some deep ecologists, ecofeminists and other theorists despise, and for good reason.

In a normal holarchy, the deeper or higher holons have an overarching influence on the lower holons. This is natural and necessary for development to occur and for unique evolutionary properties to emerge. However, it also opens up the capacity for those upper-order holons to use their influence to dominate and repress the lower-order holons. This can be seen both in individuals and in societies.[187] But it is also possible for the lower-order holons to become pathological and to create problems through a negative influence on the upper-order holons (as in the case of cancer-forming cells). Because of the holarchical structure of reality and the interconnectivity between upper and lower holons, when something goes wrong on one level it can affect the entire system. Hence, as Wilber says, the remedy for pathological holarchies involves:

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[180] *Ibid*., p. 28.
[181] *Ibid*., emphasis in original.
[182] *Ibid*.
[183] *Ibid*., p. 29.
[184] *Ibid*., parentheses in original.
[185] *Ibid*.
[186] Koestler, *Ghost in the Machine.*
[187] Wilber, *Sex, Ecology, Spirituality*, p. 30.

> rooting out any holons that have usurped their position in the overall system by abusing their power of upward or downward causation. This is exactly the cure we see at work in psychoanalysis (shadow holons refuse integration), critical social theory (ideological holons distort open communication), democratic revolutions (monarchical or fascist holons oppress the body politic), medical science interventions (cancerous holons invade a benign system), radical feminist critiques (patriarchal holons dominate the public sphere), and so on. It is not getting rid of holarchy per se, but arresting (and integrating) the arrogant holons.[188]

Wilber also points out that, as well as there being pathological holarchies, there are also pathological heterarchies where, instead of a breakdown *between* levels and the assumption of repressive domination by upper- or lower-level holons, there is a loss of distinctiveness in the holons on a given level. Their identity is no longer defined by how they are a part or a whole; they become *just a part*. They lose themselves in the other holons on their level and assume only an instrumental value for some other function, rather than a holistic, encompassing and intrinsic value. They become "merely a strand in the web"[189] with their values becoming "equalized and homogenized in a flatland devoid of individual values or identities; nothing can be said to be deeper or higher or better in any meaningful sense."[190]

Returning to the typologies of masculine and feminine, there is a concordance between the respective pathologies of hierarchies and heterarchies and these two types. Hence, pathological hierarchy tends to occur through a breakdown in agency; in the autonomous integrity, interrelationships and "respect" that arise between holons on different levels in a healthy holarchy. For example, this pathological agency or masculinity expresses itself in unhealthy rigid patriarchy. On the other hand, as noted above, pathological heterarchy occurs through dissolution of holonic intra-relationship, a loss of proper communion between holons on the same level.[191] Ecofeminists have examined and critiqued the masculine pathologies that have had widespread and deleterious effects upon both society and environment, and they have rightly sought to redress this pathological agency by restoring a focus on the need for healthy heterarchies. But Wilber warns that we should not give greater priority or importance to either hierarchy or heterarchy; both are vitally important if we want to avoid trying to cure "pathological hierarchy with pathological heterarchy."[192]

1.9.3 Deconstructive and reconstructive postmodernism

As we have seen, attacks on hierarchical social structures have occurred with good reason, particularly where hierarchies display a pathological nature; this is an important contribution of ecofeminism, to which I will return shortly. However, in completely rejecting hierarchies and value rankings, and instead singing

[188] *Ibid*.
[189] *Ibid*., p.31.
[190] *Ibid*., p.32, parentheses in original.
[191] *Ibid*., p.32.
[192] *Ibid*.

only the praises of heterarchy and universal pluralism, some of these theorists have made a validity claim that they themselves say cannot, or at least should not, exist.[193] Wilber notes that:

> their valued embrace of heterarchy is itself a hierarchical judgement. They value heterarchy; they feel it embodies more justice, and compassion, and decency; they contrast it with hierarchical views, which they feel are dominating and denigrating. In other words, they *rank* these two views, and they feel that one is definitely *better* than the other. That is, they have their own hierarchy, their own value ranking.[194]

Other authors have reached similar conclusions.[195] However, this is a simplification of postmodernism and ignores the complex reasoning that leads to this approach, regardless of how compromised an extreme postmodern position may become under the Integral lens. I believe Wilber says it to make a point of how this position does not really account for the self-imposed cultural contexts under which it is reached and, most importantly, ignores the influence of the other quadrants. Wilber acknowledges that the motivating factors for this approach are, in themselves, not wrong, and are driven by the values of freedom, altruism and "universal benevolence". Their overall thesis, that we should "cherish all cultures in an equal light", is also sound.[196] It is, rather, their complete rejection of a hierarchical underpinning or structure which fails them. It does so because it does not (and cannot, due to their avoidance of ranking and dependence upon a single quadrant) adequately explain why their pluralistic approach has more value than the pathological hierarchies they denounce. It has no explanatory power to divulge how humans have developed to a stage of consciousness where they are actually *able* to conceptualise universal pluralism, and hence to reject worldviews that support pathological hierarchies.[197] Wilber has made it clear that the pathological repression that can arise in holarchical development "is an undesirable complication within what is essentially a desirable developmental process."[198] However, in a holarchical approach, for example during the development of moral reasoning, each successive stage of development becomes more inclusive, more compassionate and altruistic. The progression from egocentric to ethnocentric to worldcentric, or even planetcentric, results in a worldview that is able to give a type of equal value and respect to all cultures and yet that is also able to see how parts of these cultures, including one's own, are *not right,* or at least "unhealthy". Integral theory embraces this holarchical approach, where reality is considered to consist of "frameworks within frameworks, of contexts within contexts, of holons within holons – with the result that values and facts are no longer automatically divorced."[199] As we have already seen, there is evidence to suggest that in order to address complex environmental problems we need to move individual and social consciousness and culture away from modernism and away from its following stage - a deconstructive (relativistic) postmodernism - to a reconstructive postmodernism that is integral in nature.[200] While those

[193] *Ibid*., p.32-38.
[194] *Ibid*., p.33.
[195] Annick Hedlund-de Witt, 'Worldviews and Their Significance for the Global Sustainable Development Debate', *Environmental Ethics,* Summer 2013, Volume 35, pp.133-162, p. 152.
[196] *Sex, Ecology, Spirituality*, p.36.
[197] *Sex, Ecology, Spirituality*, p.38.
[198] Visser, *Ken Wilber*, p. 255.
[199] Wilber, *Sex, Ecology, Spirituality*, pp.38-39.
[200] Hampson and Rich-Tolsma, 'Transformative Learning for Climate Change Engagement', p.173.

using an integral or reconstructive approach may adopt some relativistic methods to tease apart assumed concepts, they will recognise that deconstruction should not be so total as to preclude reconstruction.[201] As Wilber notes, "pluralistic relativism gives way to *universal integralism.*"[202]

1.9.4 Responses to environmental critiques, ecofeminism, and deep ecology

One of the problems with trying to use an integral ecological framework for green politics or policy is the clash that Wilberian integral theory had, and probably still has, with other ecological discourse; although this was more obvious in its early days, around the time of the publication of *Sex, Ecology, Spirituality*. This will be expanded upon below. But it is fair to say now that with Sean Hargens' and Michael Zimmerman's strong positive engagement with a range of environmental disciplines through the development of integral ecology, and their drive to bring a solid academic rigour to their ecological integralism, that while these early disagreements have not necessarily been totally resolved, they are at least on a path to a moderately peaceful coexistence. Increasing the academic rigour of integral theory has been an important step in both its general development and its move to address and incorporate positive criticism. This section will focus on some of the criticisms of Wilber from deep ecologists[203] and ecofeminists.[204] These will be summarised and responded to in a fairly general way, using a wide philosophical brushstroke that shows how integral theory and ecology honor the insights and practices of both schools, while recognising that any philosophy, whether integral, deep ecology or ecofeminism, can have its unhealthy aspects. For deep ecologists or ecofeminists making critiques of integral theory, this unhealthy face would be Wilber's so-called "mean" green meme, which has rancour for hierarchies and, sometimes, little truck with human-centric solutions to problems. A focus on ecofeminism and deep ecology is still warranted as they are the schools of thought that are at least in part responsible for the tension that still exists between anthropocentric and ecocentric worldviews.[205]

This initial defence of integral theory does not aim to be exhaustive. Instead, the insights of deep ecology and ecofeminism are strongly acknowledged as essential components of any integral ecological theory, while mention is made of their limitations and "mean" aspects. There are still underlying philosophical and practical barriers to the environmental movement adopting an integral framework that need to be addressed. Major examples include the clashes between ecocentrism and anthropocentricism, and heterarchism and holarchism, the former of each of these pairs being influential philosophical drivers for a

[201] Hampson and Rich-Tolsma, 'Transformative Learning for Climate Change Engagement', 172-173.
[202] Wilber, *Sex, Ecology, Spirituality*, p. ix.
[203] Arnie Naess, *Ecology, Community, and Lifestyle,* Cambridge University Press, Cambridge, UK, 1989.
Arnie Naess and George Sessions, 'Basic Principles of Deep Ecology', *Ecophilosophy*, 1984, 6, pp.3-7.
[204] Vandana Shiva, *Democratizing biology: Reinventing Biology From a Feminist, Ecological, and Third World Perspective*, Paradigm Publishers, Boulder, CO, 2007; Carolyn Merchant, The *Death of Nature: Women, Ecology, and the Scientific Revolution.*: HarperCollins, New York, NY, 1990; Maria Mies and Vandana Shiva, *Ecofeminism*, Zed Books, London, UK, 1993; Karren J Warren, *Ecofeminist Philosophy: A Western Perspective on What it is and Why it Matters*, Rowman & Littlefield Publishers, Inc., Lanham, MD, 2000; Charlene Spretnak, *The Spiritual Dimension of Green Politics*, Bear & Co, Santa Fe, NM, 1986.
[205] Steven Schein, *The Ecological Worldviews and Post-Conventional Action Logics of Global Sustainability Leaders*, Unpublished Ph.D. dissertation, Fielding Graduate University, 2014.

sizeable component of the environmental movement and its political arms.[206] These criticisms are gently riposted below, at least partly addressing the criticisms, and exposing strong synergies between integralism and aspects of western environmentalism with strong ecofeminist or deep ecological underpinnings. Further discussion of the mean green meme requires a revisit to the dignities and disasters of modernity discussed in Chapter One. The ecological critiques of society are only possible due to the differentiation between perspectives (the Big Three of *I, We and It*) that occurred during the development of modernity. Many of these critiques use as a base the very perspective that also led to the disaster of modernity; the ignorance of the subjective or its deconstruction onto an objective map, trying to capture reality solely in "it-language."[207] This approach *should* be anathema to deep ecologists and ecofeminists, but many end up equating all of nature to an interobjective ecological Web of Life, including a human's place in such a Web. As Zimmerman has argued, it is just as much the case that Gaia is in us rather than us being in Gaia.[208] But this focus on humans is exactly where the ecocentrist critique is sharpest, and along with her views on the limitations of heterarchy, the integralist is at risk of being labelled anthropocentric. Integral theory says one quadrant can't (at least overly usefully) be reduced to another or understood using the inunctions or paradigms of another. But integral theory doesn't encourage a wholescale dismissal of the use of it-language to describe the exterior, or even interior, world (bring to mind the use of an exterior, arguably "objective" approach to inner phenomena available under Integral Methodological Pluralism). It welcomes this perspective and that of the interior. But more importantly, it provides a way to integrate the Big Three, and to mend modernity's disassociation of the interior realms of the individual and society (the I and the we, or self and culture).

The backlash against objective, science-driven, and unhealthily hierarchical western narratives for society is epitomised by ecofeminism, which is about removing unhealthy hierarchies and power structures, and hence fighting against domination of the human and non-human environment by trying to remove or transform these unbalanced and usurping holons.[209] In many cases those espousing this ethos are engaged in activism to achieve their goals. This is exactly what integral theory strives to achieve, by recognising the need to have healthy holarchies in place and hence healthy hierarchies and heterarchies.[210] Ecofeminism favours ecocentric beliefs, with a practical manifestation of this being the ecofeminists' promotion of the use of hetarchical power relationships in organisations and systems. It claims that there is a nexus between "the unjustified dominations of women, people of color, children and the poor and the unjustified domination of nature."[211] Both deep ecology, ecofeminism and many of the philosophies underpinning

[206] Stewart Jackson, *The Australian Greens: from Activism to Australia's Third Party*, Melbourne University Press, Melbourne, 2015, p. 17.
[207] Wilber, *A Brief History of Everything*, p.163 - 165.
[208] Michael Zimmerman, 'Humanity's Relation to Gaia: Part of the Whole, or Member of the Community?', *The Trumpeter,* 2004, 20(1): 4-20.
[209] Vandana Shiva, *Democratizing Biology*.
[210] Wilber, *Sex, Ecology, Spirituality*, p. 32.
[211] Karen J. Warren, *Ecofeminist Philosophy,* p. 1.

green politics can be extremely critical of the scientific and objective approach, particularly where it manifests in technological progress that is deemed to be "inappropriate" or having adverse impacts on the planet.[212] This criticism can also apply to the use of strong developmental frameworks, where integral theory applies them to power relationships, but some misinterpret the strong support for holarchies as being support for the pathological parts of western hierarchies, which the ecofeminists have rightly criticised.

The focus on the interior means greens of various shades would be prepared to accept the need for inner development for humans. But the corresponding development of physical - or the right quadrant - space is not often as easily accepted, due to potential impacts on both human and non-human ecologies, and because of the critical approach (both positive and negative/"mean") greens take to the religious, the "objective," and development or hierarchies in general. Early criticisms of Wilber's work included that it was too stuck in what was considered an overly-western sense of progress and corresponding development. Wilber accused his critics of falling into the "mean green" meme habit of not only negatively criticising other stages or less-preferred quadrants, but also that this criticism was based on a "flatland" approach: a purely objective and interobjective right-hand analysis, which talks down development and progress if it does not fit into certain parameters. In their drive to accurately explain nature the modern-postmodern greens have, at least partly correctly, adopted the longhand of explaining it via complex ecological theories (lower-right hand quadrant). However, Wilber's criticism was that they have taken these systems theory inspired perspectives to *be* the totality of nature; they have mistaken the map for the territory. We all become strands in the web, and this flat interobjective worldspace, informed by neither a developmental or multi-perspectival framework, becomes the source of all wisdom. The flatland view can provide some insight of course, but leaves out at least half of the Kosmos and provides no way of truly weighting or valuing species, ecosystems, political systems or states, or individuals. The need for green parties and individuals to move toward an integral view is clear, as "greens find it difficult to take seriously the views of their adversaries, because supposedly only the Green perspective has any validity... in believing that all other perspectives are at best false and possibly evil, Greens exhibit the same exclusionary attitudes of people at earlier waves of development."[213]

In terms of egalitarian power structures, Wilber has acknowledged the potential benefits of a more homogenous and horizontal approach to relationships: the heterarchy discussed in Chapter One. But his primary focus was on showing how the Kosmos fitted into a more holarchical structure. This structure needs healthy horizontal growth and balance, but is based on some elements being more inclusive, which could be interpreted as stronger or more powerful, and hence more likely to cause problems if they

[212] Carol Adams, C. (Ed.). *Ecofeminism and the Sacred*, Continuum, New York, NY, 1993; Carolyn Merchant, The *Death of Nature*; Val Plumwood, *Feminism and the Mastery of Nature*, Routledge, London, UK, 1993.

[213] Sean Esbjörn-Hargens and Michael E Zimmerman, 'An Overview Of Integral Ecology: A Comprehensive Approach to Today's Complex Planetary Issues', in Mickey, Kelly and Robbert (eds), 'The Variety of Integral Ecologies', pp. 55-80, p 75.

become unhealthy. This is where the Ecofeminist critique of Wilberian integralism was cutting, as were some deep ecological critiques, levelling the Ecofeminist accusation that Wilber's work was open to interpretation as reinforcing existing power structures, and the deep ecologists' shouts that it was absolutist and monistic. But Wilber's tongue-in-cheek claim that he had developed a "Theory of Everything" was never meant to be an attempt to say he had found the principle upon which everything existed. Wilber does not attempt to develop a grand truth that excludes other truths; he does not "attempt to inflate partial truths within an overall model."[214]

Perhaps the best way to dispel the myth of incompatibility between integral theory and deep ecology and the latter's criticism of integralism as being a monistic philosophy is to examine how the "everyone is right" approach of integralism is strikingly similar to Arne Naess' "non-zero status of validity" for perspectives or "fundamental positions". That is, Naess permits all (or, perhaps most) of the various perspectives, points of view or "total views" to have non-zero validity:

> If two positions cannot be compared to truth, if they cannot be refuted in the sense of Popper, the one does not, in relation to available conceptual frameworks, have a greater validity than the other. Neither can we say that both are lacking in validity, because that would leave us without anything to start with.[215]

This would allow discourse and dialogue to be established between the basic disciplines or knowledge gathering practices, and, one could extrapolate, between metaphilosophical propositions as well. Integralism can't be monistic as it is based on the existence of a non-dual reality, which is not constituted by, or able to be reduced to, physical, mental or spiritual things alone, but rather all of these things together, which may arise from an underlying spirit or a divine that is both immanent *and* transcendent. As we have seen, integral theory refuses to fall prey to the disaster of modernity, which is itself a kind of material monism that reduces everything to the physical, or to it-language. Integral ecology clearly treats Deep ecology with much respect, as we saw during the exploration of the ecoselves. Aspects of Deep ecology can be manifested anywhere between a relatively "low" level of ecological consciousness up to a second-tier consciousness.

For example, an introspective deep ecologist, who often has second-tier ecocentric experiences of nature, could use Naess' non-zero approach to increase his appreciation of how the four quadrants of integral theory could be useful in analysing a situation. He would not necessarily be locked into believing that all environmental problems could be solved by ecocentric policies, but could also logically accept a number of anthropocentric solutions. On the other hand, a forest protester may be driven by an ecocentric ethos and philosophy, and espouse that all should follow a similar path, but not have (necessarily) had any higher-

[214] Visser, *Ken Wilber*, p. 40.
[215] Arne Naess, 'Reflections on Total Views', *Philosophy and Phenomenological Research,* 1964, 25, pp. 16-29.

level interior ("state") experiences to back it up (or it could be the opposite, a protester may have had any number of peak or transpersonal experiences and also gained a more inclusive, second-tier perspective, informed by a deep cognitive understanding of the complex ecological, social, economic and developmental issues that must be addressed to bring changes to environmental policies).

However, regardless of the way Deep Ecological frameworks are manifested, they are based on an intersubjective and interior "total view". But, like any total view in deep ecology, or perspective in integral theory, they are an essential part of the equation. Rather than saying he has found the essential platonic substance that makes up the universe, Wilber negates this monistic interpretation by always stating up front that the "map is not the territory."[216] All that integral theory does is to orient you on a map, it gives you a conceptual sketch. You can use a right-hand quadrant analysis to detail the basic physical structure of the universe, down to quarks and bosons and such. You can use all of the quadrants to map out the Kosmos at a large and small scale, but the map and theory itself is not the principle underpinning the universe. Indeed it doesn't preclude the development of more finely nuanced methodologies (new facets of the basic eight available) that would increase the scope and accuracy of its mapping project.

There will be perspectives available through deep ecological or ecofeminist-inspired introspection and practice that are not accessible through objective, or even interobjective ecological approaches that merely make a map of flatland ecology, despite its holistic appearances. If anything, integral theory points us to the inescapable conclusion that there are higher and more inclusive deep ecological and ecofeminist perspectives available, and that no final answer to a universal equation will be completely satisfactory, regardless of which total view we adhere to. Integral theory means we accept the validity of each total view, each perspective, and use its underpinning principles to show how the picture may - or may not - fit together. More recent developments of Wilber's work show how the Kosmos cannot be reduced to any one thing or substance. It is a complex system of *holons having multiple perspectives*, a view also honoured in integral ecology. It is this acceptance of other total views, in particular other metatheories, which has led to the dialogue with Critical Realism, an important point in the evolution of integralism.

Integral theory has been criticised as being too individualistic, too focused on individual development, and supportive of existing hierarchies.[217] However, the growth of individuals and societies is seen through the prism of striving for a healthy attainment of each level of development. As noted in Chapter One and reiterated above, integral theory supports many of the ecofeminist criticisms of pathological aspects of patriarchal societies. However, the transpersonal origins of Wilberian integral theory means it has a core focus on the development of the self, and of the how, or the method, of attaining an integral or second-tier perspective. It does this in the main by articulating a complex epistemological theory, leading to the ability to build up a detailed picture of the person perceiving nature and the methods they use to understand it,

[216] Wilber, 'Introduction to Integral theory and Practice'.
[217] Schwartz, 'On social holons.'

all underpinned by a multi-perspectival ontological framework that is adequate enough but still individualistic and seemingly selfish. There is probably a good reason that some ecofeminists took aim at integral theory's initial incarnations, which appeared to favour the individual somewhat at the expense of society. The use of Critical Realism to query and bolster integral theory helps to address this limitation, as Critical Realism is more society-centric, attempting to find the "injustices therein which must be addressed for collective emancipation."[218]

Returning to the Ecofeminist critique, Wilber makes his agreement with unhealthy hierarchies clear, while at the same time making a comment on the mean green and "flatland" viewpoints of deep ecologists, ecofeminists and ecological theorists:

> Granted, rigid social hierarchies are deplorable, and oppressive social rankings are pernicious. Postmodernism has fortunately made us all more sensitive to those injustices. But even the anti-hierarchy critics have their own hierarchies (or value rankings). The postmodernists value pluralism over absolutism - and that is their value hierarchy. Even the ecophilosophers, who abhor hierarchies that place humans on the top of the evolutionary scale, have their very own strong hierarchy, which is: subatomic elements are parts of atoms, which are parts of molecules, which are parts of cells, which are parts of organisms, which are parts of ecosystems, which are parts of the biosphere. Thus they value the biosphere above particular organisms, such as the human being, and they deplore using the biosphere for our own selfish and ruinous purposes. All of that comes from their particular value hierarchy. [219]

In some ways this is a "mean integral" meme slap from Wilber. It makes a point that reveals the weakness of extreme postmodernism or ecofeminism, but does not reflect his overall positive support for a reconstructive postmodern project. It is clear that there will probably always be some tension between well-established ecological critiques like ecofeminism and an integral view, which seeks to use their insights while at the same time critiquing their unhealthy side. However, deep ecology and ecofeminism may form critical parts of an integral ecological approach, and their subjective and intersubjective insights offer a keen reminder of the objective nature of the integral map itself. I will now turn to the sundering of values and facts which occurred through the development of modernism, and explain how an Integral approach seeks to mend this split.

1.10 Rescuing the dignity of modernity and postmodernity, and dealing with the disasters

As we have seen, the quadrants can be collapsed into a simplified version that Wilber calls the *Big Three: I, We and It*; the Beautiful, the Good, and the True; or arts, morals and science. This is a useful summary, as both of the Right-Hand quadrants represent objective exteriors, either individual (“it”) or collective (“its”).[220] These realms have always been present throughout the ages, evolving and arising together. However each dominant worldview, or as I will label it, 'age of discourse', has its own special relationship to

[218] Jack H Buchanan and Douglas J Reinemann, ‘Critical Realist Integral Methodological Pluralism’, *Journal of Integral theory and Practice,* 2013, 8(3&4), pp. 317-325.
[219] Wilber, *Sex, Ecology, Spirituality*, p. x.
[220] Wilber, *A Brief History of Everything*, p.163.

the quadrants, both in terms of if or how they were differentiated and in terms of which quadrants were privileged or dominant. In premodern times, the dominant view was a type of merging or amalgam between the subjective and objective realms, "where arts and science and religious morals were all indiscriminately fused."[221] During the development of the modern era and the Enlightenment paradigm these realms became fully differentiated, and objective approaches to understanding the world were privileged. This dominance, however, engendered a move towards a postmodern world, where the subjective realms were rescued. It is on the modern and postmodern that I will focus, and particularly how these different ages of discourse relate to the development of Wilber's theory.

Wilber points out how the Big Three "are Sir Karl Popper's three worlds – objective (it), subjective (I), and cultural (we).[222] The Big three are also Jürgen Habermas's three validity claims or areas of objective knowledge (it), subjective "aesthetic judgment" or sincerity (I), and "moral-practical insight" or intersubjective justness (we).[223] The three are also present in Kant's immensely influential trilogy – the Critique of Pure Reason (objective science- it), the Critique of Practical Reason (morals - we), and the Critique of Judgment (aesthetic judgment and art - I).[224] The basic Enlightenment paradigm, or the general thrust of modernity, was about reducing the subjective or intersubjective into objective maps or descriptions of reality; in effect thinking that "all of reality could be captured in it-language, which alone was supposed to be 'really real'" and reducing "all the Left-Hand dimensions to their Right-Hand correlates".[225] The dialectic of progress means that every new level or stage brings both good news and bad news, so this reductionism had drawbacks. In this case the bad news is the so-called 'disaster of modernity', which was the impetus for the development of postmodernism and a swathe of environmental critiques. The development of modernity also meant that the Big Three were for the first time *fully* differentiated; there was no longer a fusion of or confusion between these domains.[226] Wilber exemplifies how, before the maturing of the modern era, differentiation between the subjective and intersubjective or cultural domains was absent: "if you disagreed with Church religion, with the cultural background, then you were not just a *heretic*, you were also a political *criminal* – you could be tried by the Church for *heresy* and by the State for *treason*, because these had not yet been differentiated."[227] Modernity also meant that practitioners in the I, We and It domains could develop further knowledge and understanding in these realms without repercussions. Hence the "extraordinary differentiation of the Big Three - the differentiation of arts, morals and science - has been called, by Weber and Habermas, the *dignity* of modernity…You could look through

[221] *Ibid*., p. 165.
[222] Karl Popper, 1978, '*Three Worlds*', The Tanner Lecture on Human Values, Delivered at The University of Michigan, April 7, 1978, tannerlectures.utah.edu/_documents/a-to-z/p/popper80.pdf, accessed 8 May 2017.
[223] Jürgen Habermas, *Moral Consciousness and Communicative Action*, p.4.
[224] Wilber, *A Brief History of Everything*, p. 164.
[225] *Ibid*., p. 165.
[226] *Ibid*.
[227] *Ibid*., p. 166, emphasis in original.

Galileo's telescope without being burned at the stake. And all of that was good news indeed."[228] This is not to say that this dignity came all at once and stayed in place or that this good news aspect has taken root in all corners of the earth even today. In many ways, the project of modernity is not complete, even though we can recognize its dignities, its limitations and the bad news it engendered.

Wilber points out that evolution occurs through differentiation followed by integration. Modernity differentiated the Big Three, but it did not *integrate* them. [229] It wasn't just differentiation that occurred, but also *disassociation.* The interior realms of the individual and society (the I and the we, or self and culture), despite being granted a small part in the play, were generally sidelined to the wings while science took most of the curtain calls:

> The great and undeniable advances in the empirical sciences from the Renaissance to the Enlightenment made it appear that all of reality could be approached and described in… objective scientific terms… The Big Three were reduced to the 'Big One' of scientific materialism, scientific exteriors and objects and systems. And so the it-approaches began to *colonize* the I and the we domains… so all of reality began to look like a bunch of its, with no subjects, no consciousness, no selves, no morals, no virtues, no values, no interiors, no depths.[230]

The mapping of the objective "it" domains is a reasonable enough approach. After all, every holon has a Right-hand domain, and interior events in the Left-hand domains often have a Right-hand aspect that can be measured. The mapping of the objective world, as complex as it can be, is also frequently much more straightforward compared to the interpretation of the often murky interior world of self and culture.[231] But this mapping or mirroring of a pre-given world left out "the mapmaker and the interiors altogether."[232] Such reductionism is critiqued by "new paradigm" theorists and environmental philosophers, who note that atomism, or what Wilber calls gross reductionism, was key to the Enlightenment, and that this can be remedied by a holistic or systems theory approach.[233] However, Wilber contends that the dominant theme of the Enlightenment was not atomism or gross reductionism, but an interobjective systems approach, which he describes as subtle reductionism, or a great "'web of life' conception."[234] This contention is debatable, but it is accurate to say that the Enlightenment was in the main about the mapping and representation of the Right-hand holarchies. It ignored the Left-hand holarchies as domains in their own right, collapsing them and all the other realms or quadrants into what Wilber calls the Big One, or flatland.[235]If we are to rescue the dignity of modernity then, we need to look beyond systems theory, as the overemphasis on this Right-hand holism or flatland is part of the problem.[236] Indeed, it is just another form of reductionism: *subtle reductionism.*[237] It might elegantly describe the physical and objective universe, but removes the value, the depth, the consciousness; or, if it recognizes that they exist at all, treats them at

[228] *Ibid*.
[229] *Ibid*., p. 167.
[230] *Ibid*., p. 168, emphasis in original.
[231] *Ibid*.
[232] *Ibid*., p. 168.
[233] *Ibid*.
[234] *Ibid*., p. 169-170.
[235] *Ibid*., p. 170.
[236] *Ibid*.
[237] *Ibid*., p. 171.

best as “merely subjective.” To move past the “disaster of modernity”, the disassociation of the quadrants, something is needed to integrate them. Wilber posits that this is the task of post-postmodernity (or reconstructive postmodernism): to try and get "some balance back into the picture, largely by trying to honor science and morals and aesthetics equally, and not simply reduce one to the other in an orgy of theoretical violence.[238] Integral theory therefore builds on the postmodern project by emphasising the importance of the inner world of you and I, and the subjective rules and shared reasoning that creates culture. But it also preserves all that is best about modernity. Integral theory honours the advances in the understanding of our world brought about through the creation of objective and scientific maps of reality. And it also recognises that the differentiation between the subjective and objective worlds and the various disciplines, methodologies and practices in each realm that developed during modern times was a key point in human evolution.

1.11 Engagement with other metatheories and frameworks - Bhaskar's Critical Realism

As with any developing philosophical framework, closer observation and comparison with existing philosophies will locate strengths, weaknesses, differences and similarities. One of the most striking similarities has been with the philosophy of Critical Realism, which originated in the works of Roy Bhaskar. The two philosophies have begun a fruitful dialogue and in particular Critical Realism has helped to provide a solid underpinning for a more rigorous integral philosophy.[239] It is beyond the scope of this thesis to provide any deep analysis of the current nexus between integral theory and critical realism. While it is one key aspect in the development of integrative thought, it is not required for this exploration of integral policy and politics. However, readers would be rewarded by pursuing a number of useful initial comparisons and syntheses that have arisen from this theoretical collision and collusion.[240] In short, Critical Realism and Wilberian integral theory find limitations with each other, but they also enrich each other, and demonstrate that the continued evolution of integrative thought and metatheory is carrying on apace.

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[238] *Ibid*., p. 172.

[239] Roy Bhaskar, Sean Esbjörn-Hargens, Nicholas Hedlund and Mervyn Hartwig, *Metatheory for the Twenty-first Century: Critical Realism and Integral theory in Dialogue*, Routledge, New York, 2016.

[240] David M Zeitler, Amanda L Haboush and Timothy R Cox, 'Reflections On Two Research Communities: Comparing the “Toward a Science of Consciousness Conference” and “Integral theory Conference” Research Communities', *Journal of Integral theory and Practice*, 2012, 7(4), pp. 107–125.

Ken Wilber, 'In Defense Of Integral theory: A Response to Critical Realism', *Journal of Integral theory and Practice*, 2012, 7(4), pp. 43 – 52.

Paul Marshall, 'Toward An Integral Realism: Part 1: An Overview of Transcendental Realist Ontology', *Journal of Integral theory and Practice*, 2012, 7(4), pp. 1–34.

Paul Marshall, 'Ken Wilber On Critical Realism', *Journal of Integral theory and Practice*, 2012, 7(4), pp. 35 – 38.

Roy Bhaskar, 'Considerations on “Ken Wilber on Critical Realism”', *Journal of Integral theory and Practice*, 2012, 7(4), pp. 39 – 42.

John O'Neill, 'Toward a Metaintegral Philosophy: Mysticism in the Philosophies of Bhaskar, Pannikkar and Wilber', *Journal of Integral theory and Practice*, 2013, 8(3&4), pp. 245 – 254.

2. Integral ecologies

2.1 Integral ecologies: Restoring the interiors of nature

In Chapter One I posited how current ecopolitical platforms and policies are, by themselves, insufficient to lead to the ecological society, and, in particular, that humanity is unlikely to widely adopt a 'purely' ecocentric philosophy. However, once I had found a way to articulate this, through integral theory and integral ecology, I was also presented with an apparent solution to my dilemma. In broad terms, it revolved around the need for a strong developmental or holarchical framework to underpin green policies and politics, and for green proponents to understand and respect the fact that people or societies at every (healthy) stage of development have a constructive and worthwhile relationship with nature that must be respected. Green policies also needed to be based on an understanding that, ideally, change must occur in all four quadrants, and that each quadrant or perspective has its own way of tackling environmental problems that should be honoured and incorporated into overall solutions. The lack of such a framework hampers a full comprehension of the collective exterior political systems (Lower-Right quadrant) and cultural mores (Lower-Left quadrant) that progressive parties may be trying to change.

It also means that efforts to understand a person's psychological relationship to nature (Upper-Left), and hence how they may respond to green policies, can be limited. I do not believe that there is a total lack of understanding of these systems or of the role played by individual psychologies within the philosophies and policies of the greens. In fact, many of the policies they advocate involve a highly sophisticated multidisciplinary approach that accounts for a number of quadrants. However, a coherent framework to address all the quadrants and development within them is lacking. The environmental "node" of integral theory, integral ecology, is clear about the need for ecological approaches of any type to take into account the four basic perspectives, to honour the subjective and intersubjective, and to be aware of the evolutionary or developmental nature of reality:

> Not only does Integral ecology study interiors in addition to exteriors, but it also studies how those interiors develop within organisms in general and humans in particular. Integral ecology acknowledges that all organisms have subjective and intersubjective dimensions and describes how *interior development in humans determines in profound ways our relationship to the natural world*. Until now, ecologists and ecological discourse have mostly excluded an explicit recognition of interiors and their development – and make no mistake, there is a need to understand our interior individual and collective relationship to the natural world, for it is within our interiors that motivation to treat the natural world in healthier ways resides.[241]

The earliest expressions of ecological endeavour were generally exercises in the study of the exterior of organisms or the habitats and environmental systems they inhabited. However, as with other disciplines, it soon multiplied into numerous schools and camps.[242] Most of its modern manifestations were about reducing the subjective or intersubjective environment into objective maps or descriptions of reality. There have developed, nonetheless, environmental and ecological schools that focus on the interiors of nature,

[241] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 7, emphasis mine.
[242] Esbjörn-Hargens and Zimmerman, 'An Overview Of Integral Ecology', p.55.

both collective and singular. An unforgiving reductionist scientist would probably shudder at naming such approaches *ecological.* However, given that these schools focus on mapping the interior subjective aspects of nature, labeling them ecological or environmental is appropriate. Sean Esbjörn-Hargens, one of the main progenitors of integral ecology, set out to create a list of all of the major schools of ecology and conceptual approaches to the environment. A task of hours became weeks and then a year and "the list now includes almost two hundred unique approaches to and perspectives on ecology - most of which have their own journals, institutions, and communities of practitioners."[243] Given the range of disciplines and schools, and the fact that they express a range of interior and exterior approaches to the environment, Esbjörn-Hargens used Wilber's integral framework to categorize and link these seemingly disparate approaches, while recognizing and honouring each. Integral theory provides a way to integrate the many fields of ecology and environmental disciplines within a multidimensional, transdisciplinary approach to nature and the human beings that are an integral part of nature. It "provides a way of understanding the relationship between *what* is perceived as nature (ontology), *who* is perceiving nature (epistemology), and *how* the perceiver uses different methods, techniques, and practices to disclose nature (methodology)."[244] Other authors have traced the evolution of ecological thought, from the coining of the term *oecologie* by Ernst Haeckel to the work of Charles Darwin, to the 'new ecology' proponents of the twentieth century: Charles Elton and Arthur Tansley - and the integrative (albeit mostly objective and interobjective) ecology of Eugene Odum, moving to deep ecology and environmental ethics, amongst other near-contemporary and contemporary ecological schools of thought.[245] As shown below, the integrative nature of a number of schools of ecology became more prominent in the mid-1990s.

Integral ecology is well placed to bridge what appears to be gap between anthropocentric and ecocentric approaches in ecopolitical theory. The former is focused on theories that promote human emancipation within an ecological framework, whereas the latter incorporates these goals within the wider emancipation of the non-human world, which is seen as having intrinsic value.[246] This apparent divide is also present in other environmental disciplines, such as environmental history and environmental sociology.[247] My contention is that this is not so much a fundamental and irreducible divide that can never be bridged. It is more about differences in the perspectives taken on environmental issues and differences in the stages or levels of development. Integral ecology offers a good solution to this dilemma, as it helps to explain why each approach or perspective is partly right, though each by itself is not adequate to address environmental problems. In terms of differences in stages of development, this was explored in Chapter One with regard to moral development; the progression from egocentric to ethnocentric to worldcentric or pre-

[243] Esbjörn-Hargens, 'Integral Ecology. An Ecology of Perspectives', p. 268.
Esbjörn-Hargens and Zimmerman, 'An overview of integral ecology', p 63.
[244] *Ibid*.
Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', p 56.
[245] Mickey, Kelly and Robbert, 'The History and Future of Integral Ecologies', pp.2-7.
[246] Eckersley, *Environmentalism and Political Theory*, pp. 7-31.
[247] *Ibid*., pp.28 - 29.

conventional, conventional and post-conventional). It is not until a worldcentric stage is reached that a genuine ecocentric or planetcentric approach is possible. That is partly because humans form an integral and necessary part of the biosphere and any stand-alone approach to environmental problems that leaves them out or dismisses them as a nasty plague on the Earth is probably doomed to fail. It is also because the development required to reach the worldcentric stage is also a necessary precursor to the gaining of an expansive compassion for all beings and the biological systems that sustain them. The overview of Integral ecology in the next section will make clear how at least some of these differences in perspectives and stages of development could manifest as the seemingly different anthropocentric and ecocentric approaches.

As noted in chapter one, a variety of integral ecologies emerged in 1995 along with Wilber's implicit integral ecology and the explicit version of Esbjörn-Hargens and Zimmerman.[248] For example, the liberation theologian Leonardo Boff also used the same term, and for him ecology is not just contingent on the natural environment, but also on society and culture.[249] Boff's four approaches to ecology (and their approximate corresponding Wilberian and EZI terms) are: i) environmental, which draws on the biophysical sciences and technological development (objective and interobjective quadrants/the "*its*"/EZI's "Terrain of Behaviours" and "Terrain of Systems"); ii) social, which relates to human culture within nature, addressing problems of social justice and propagating sustainable social institutions (intersubjective quadrant/the "*we*"/EZI's "Terrain of Cultures"); iii) mental, which relates to consciousness and self-development (subjective quadrant/the "I"/EZI's "Terrain of Experiences"); and iv) integral, which brings these three ecologies together (Wilber's and EZI's frameworks). Esbjörn-Hargens and Zimmerman recognise Boff's pioneering work, but note that it "has no model that accounts for personal, cultural, and social development."[250] While it may lack a specific model, it clearly still has evolutionary underpinnings. Drawing on the earlier evolutionary concept of the 'cosmogenetic principle' from Thomas Berry and Brian Swimme,[251] Boff recognises that evolutionary processes include three components: (1) complexity (Swimme and Berry's *differentiation*), which structures the exterior of things (Wilber and EZI "Its"); (2) self-organisation and consciousness (*autopoiesis*), which structure interior facets ("I"); and (3) reconnection and relation (*communion*), which structures the way things connect not merely as a collection of objects, but as communing agents and subjects ("We").[252] Boff's four ecologies and his three components of cosmogenesis are hence mirrored in many of the Wilberian concepts I have already discussed; the quadrants and their evolution, and the call for an honouring of numerous approaches using an integrative framework. Esbjörn-Hargens and Zimmerman, along with others, also recognise the numerous types of integral ecologies, from

[248] Mickey, Kelly and Robbert, 'The History and Future of Integral Ecologies', pp. 8-19.
[249] Leonardo Boff, *Ecology and Liberation: A New Paradigm* (J. Cumming, Translator), Orbis Books, Maryknoll, NY, 1995.
[250] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p 539; Mark D. Hathaway and Leonardo Boff, *the Tao of Liberation: Exploring the Ecology of Transformation,* Orbis Books, Maryknoll, NY, 2009.
[251] Brian Swimme and Thomas Berry, *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era - A Celebration of the Unfolding of the Cosmos*, HarperCollins, San Francisco, CA, 1992., p71-72.
[252] Mickey, Kelly and Robbert, 'The History and Future of Integral Ecologies', pp. 9-10.

EZI, to that of Boff, Swimme and Berry[253], and other critical contributors such as Mark Hathaway[254], Ken Wilber, Félix Guattari[255], Edgar Morin[256], Holmes Rolston III[257], and Pope Francis.[258] While the methodology of EZI is the core integral ecology drawn upon for this thesis and the IPT model, the potential contribution of these other integral ecologies should not be ignored, particularly during the practical rollout and subsequent analysis of any Person, Polity, Planet approach. As Esbjörn-Hargens and Zimmerman note:

> Integral ecology advances the development and application of a comprehensive approach to environmental issues. This approach organizes insights from various eco-approaches into an all-inclusive framework. Integral ecology also connects the various schools of environmental action to the domain of psychological development and the study of worldviews. Integral ecology transcends many of the problems that have assailed contemporary partial approaches to the environment, and moves toward a developmentally informed understanding of individuals, cultures, behaviors, and systems. As a result, Integral ecology draws on the expertise of many disciplines and offers extremely comprehensive, far-sighted, and flexible solutions for the environment—solutions that can carry us into right relationship, at multiple scales, with the earth.[259]

They indicate that "a wide variety of ecologists, environmentalists, urban planners, wilderness guides, and activists" have recognised its theoretical comprehensiveness and have been using it in a variety of ways: from "community development in El Salvador, marine fisheries in Hawaii, eco-activism in British Columbia, climate-change initiatives in Norway, permaculture in Australia, environmental policy in Tasmania, sustainable consumption and waste reduction in Calgary, and urban design in Manitoba."[260]

2.2 An Integral Ecology Primer: Good News; Bad News; and Perfect News

Do You Want the Good News or the Bad News First? The intention is to avoid a bad news story, at least for now. Too many articles and books on the environmental crisis begin like that. Although portents of doom are easy to construct, I do not want to underestimate the scale of the environmental challenge facing humans and other species and the ecosystems we all inhabit. Integral ecology does not hide its head in the sand here either, but has other insights to share, including that “things are getting worse, are getting better, things are Always Already perfect.”[261] For now, I am going to focus on the fact that things are getting better. I had to settle upon this for a starting point, particularly as the thesis seeks to construct an integral platform and agenda for policy development, implementation and evaluation. So it must be a

[253] Sam Mickey, 'For an emerging Earth community: Thomas Berry and a shared dream', in Mickey,S, Kelly, S and Robbert, A, eds, *The variety of integral ecologies: nature, culture and knowledge in the planetary era*, State University of New York Press, Albany, pp. 31-54; Swimme and Berry, *The Universe Story;* Elizabeth Allison, 'The Relational Spiral of Integral Ecology', in Mickey, Kelly, and Robbert, *The Variety of Integral Ecologies*, pp. 161-188.
[254] Mark D. Hathaway, 'Cultivating wisdom: Toward an Ecology of Transformation', in *The Variety of Integral Ecologies*, pp. 131-160.
[255] Felix Guattari, The Three Ecologies. Translated by I. Pindar and P. Sutton, Athlone Press, London, 2000.
[256] Sean Kelly, Integral Ecology and Edgar Morin's Paradigm of Complexity, in *The Variety of Integral Ecologies*, pp. 81-101.
[257] Michael E. Zimmerman, 'Integral Ecology's Debt to Holmes Rolston III, in *The Variety of Integral Ecologies*, pp. 103-127.
[258] Mickey, Kelly and Robbert, 'The History and Future of Integral Ecologies', pp. 8-19; Esbjörn-Hargens and Zimmerman*, Integral Ecology*, pp. 538-540.
[259] Esbjörn-Hargens, Integral Ecology. A Post-metaphysical Approach to Environmental Phenomena’, p.307.
[260] Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', p 57; Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 350-475.
[261] *Ibid*, pp. p. 307-309.

practical approach to the challenges facing us, one that honours and recognises the contributions that have been made in a wide variety of fields, from environmental architecture to environmental Zen. It must be one that recognises that many politicians, political parties and policymakers want to improve the lot of all; although often "all" is only "all humans", or "all of my constituency". But even this anthropocentric drive must be honoured and included in any truly comprehensive approach to resolving environmental challenges. Here, a recent paper by Zimmerman which details part of his journey from deep ecology to integral ecology is instructive.[262]

By discounting or ignoring the potential part solution each perspective provides to any environmental challenge, we undermine our understanding of the causes and solutions to these challenges. Things *are* getting better. The 200-plus distinct approaches to, or perspectives on, the environment that have been developed by humans reflect this hopeful stance.[263] Recognition that we have developed so many unique ways of valuing and caring for and assisting the protection of the natural world takes us away from indictment, rather than the schoolmaster caning expected during a typical environmental history class. It is a perspective that does not forgive or forget our past omissions or ignorance. But it certainly shows the value that we place on the environment and nature. Whether envisaged as God, goddess, mother, or money in the bank, we all have our own personal and collectively held thoughts and beliefs about the environment, and ways of gathering objective and subjective knowledge of its workings; usually to benefit ourselves, but often to benefit it. Integral ecology recognises these natural developmental or 'native' perspectives, whilst also providing a cognitive map for integrating all currently available approaches to ecology and the environment.

When analysing an environmental issue or challenge, Integral ecology has a minimum three-pronged approach. It considers "what" parts of reality or what quadrants or perspectives - what it calls terrains - are being looked at, privileged or indeed affected. It considers "who" is looking at these quadrants, or what individual (or collective developmental) level or stage the observers are at. Finally, it explores "how" environmental issues and challenges are being investigated; that is, the native perspectives, fields of endeavour, or methodologies used to understand a challenge and provide a solution; in other words, it proposes a mode of inquiry that uses the a metatheoretical (and meta-methodological) approach based on Integral Methodological Pluralism.[264] As a direct offshoot of integral theory, the underlying framework of EZI is based on the I\Wilberian integral model of *quadrants, levels, lines, states and types*, which is summarised in Chapter One. These elements have a specific nomenclature under integral ecology:

> Integral ecology examines the relationship between knower and known: in which reality (the What), the onlooker (the Who), and the method (the How) interact in complex ways (Who x How x What). Integral ecology

[262] Michael E. Zimmerman, 'From Deep Ecology to Integral ecology: A Retrospective Study', *The Trumpeter,* 2014*,* Volume 30, Number 2, 247 – 268.
[263] Esbjörn-Hargens, Integral ecology. A Post-metaphysical Approach to Environmental Phenomena', p. 305.
Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', p 63.
[264] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 182.

> proposes that the What consists of at least 4 terrains and their twelve niches, the Who consists of at least 8 ecological selves, and the How consists of at least 8 ecological modes or methodologies.[265]

Just as the basic Integral framework requires us to consider all quadrants, all levels, all lines, all states, and all types, "Integral ecology strives to honor all niches of environmental concern, all selves of environmental identity, and all modes of environmental inquiry: all-niches, all-selves, all modes."[266] As Esbjörn-Hargens and Zimmerman note, the coordination and assessment of the relevant perspectives "requires the use of multiple first-, second- and third-person methods in an interrelated fashion."[267] The following exploration of EZI provides a description of this "what, who and how".

2.3 The ontology of ecological knowledge: The Four Terrains

Integral ecology considers the "what" or ontology of environmental and ecological phenomena by investigating which quadrants are being privileged in any particular environmental approach. As detailed in Chapter One, the perspectives represented58 by the quadrants are phenomena that are knowable. In integral ecology the four quadrants are known as the *Four Terrains*. As with integral theory in general, Integral ecology proposes that, due to its complex pluralistic nature, the environment cannot be fully understood using singular objective methods alone.[268] Esbjörn-Hargens and Zimmerman note that ecosystems are created through the simultaneous arising (or what they call the "tetra-mesh") of all four quadrants.[269] However, "this does not mean they are simply created or constructed by individuals or organisms. Ecosystems contain intrinsic features (i.e., are objective and interobjective), but those intrinsic features are disclosed through an interpretive encounter between an organism and its environment."[270] The four terrains allow us to investigate all of the aspects of an environmental challenge and each adds its own value in working with complex ecological issues.[271]

The Terrain of Experiences represents the individual interior, or the subjective, Upper-Left quadrant. This Terrain is known through subjective felt-experience, such as direct perception, introspection, phenomenological investigation and meditation. It reflects the interior of individual holons. It is expressed through and observed in the individual physical, emotional, cognitive and spiritual experiences of humans and nonhumans.[272] Examples include the emotional distress that could be experienced by a person after

[265] *Ibid*.
[266] *Ibid*., p. 182-183.
[267] Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', p 63.
[268] *Ibid*., p.183.
[269] *Ibid*.
[270] *Ibid*., p. 183-184.
[271] Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', p. 62.
[272] Esbjörn-Hargens, 'Integral ecology: A Post-metaphysical Approach', p. 309; Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', pp. 58-59.

seeing old growth forest clear felled, the pain experienced by an animal as it succumbs to a disease, and the satori of a Zen practitioner. It includes experiences "at all levels of perception."[273]

The Terrain of Cultures represents the collective interior, or the intersubjective, Lower-Left quadrant. This Terrain is known through intersubjective mutual resonance, such as dialogue, interpretation and understanding. It reflects the interior of collective or social holons. This Terrain is known through objective observation, such as field research, sensory perception, and empirical measurement. It reflects the exterior of individual holons. Examples would include the shared perceptual worlds or modes of communication that exist between humans, between animals, and between humans and the nonhuman world.[274] Shared community morals and mores, symbol and sign systems (semiotics and biomsemiotics), and the range of historical, modern and postmodern collective views on the relationship between human communities and the natural world would also form part of the Cultural Terrain. It includes cultures "at all levels of mutual resonance and understanding."[275]

The Terrain of Behaviours represents individual exterior, or the objective, Upper-Right quadrant.[276] This Terrain is known through objective observation, such as field research, sensory perception, and empirical measurement. It reflects the exterior of individual holons. This is the area of traditional objective empirical science. Examples include a list of plant species in a woodland copse, the concentration of pesticides in a stream, and the objectively observed behaviour of cycling to work instead of taking a car. It includes behaviours "at all levels of organization."[277]

The Terrain of Systems represents the collective exterior, or the interobjective, lower-right quadrant. This Terrain is known through interobjective systemic analysis or functional fit, such as the study of part-whole relationships, and observation of system dynamics. It reflects the exterior of collective or social holons. [278] It represents the behaviour of complex interactions within and between natural and cultural systems, focused on phenomena that can be observed and objectively described and interpreted.[279] Examples include political and economic systems, and how these interact with natural systems. It includes systems "at all levels of ecological and social intersection."[280] A summary of the Four Terrains is provided in Figure 2.1.

[273] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p.184.
[274] *Ibid*, p. 310.
[275] *Ibid*.
[276] Esbjörn-Hargens, 'Integral Ecology: A Post-metaphysical Approach.'
[277] Esbjörn-Hargens and Zimmerman*, Integral Ecology*, p.310.
[278] *Ibid*., p.185.
[279] Esbjörn-Hargens, 'Integral Ecology: A Post-metaphysical Approach.'
[280] Esbjörn-Hargens and Zimmerman, *Integral Ecology, p.185*.

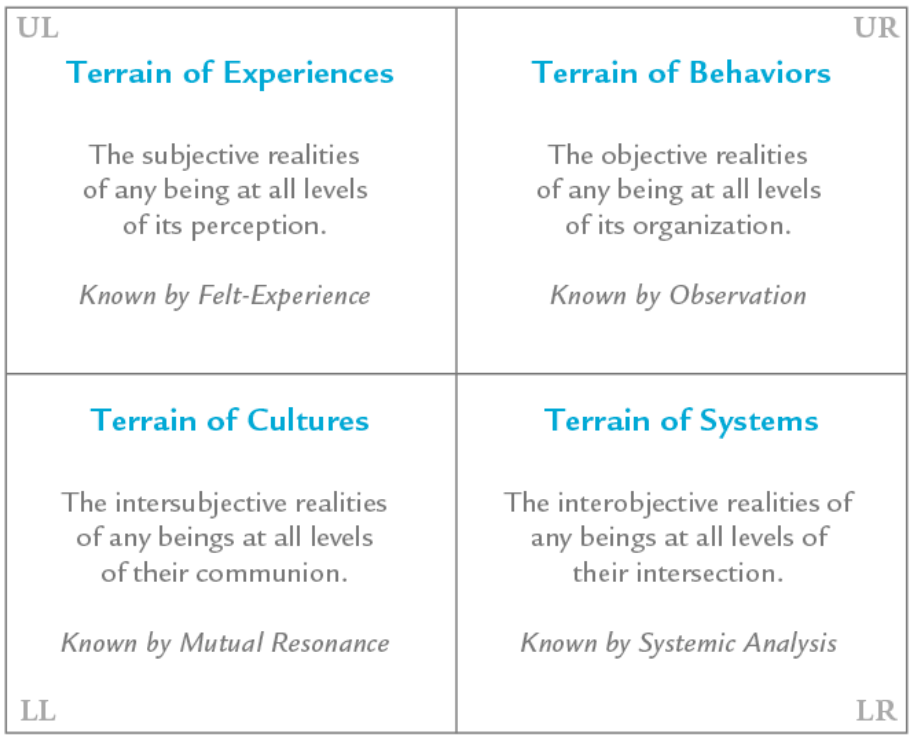

Figure 2.1 The Four Terrains (from Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 186)

Integral theory and integral ecology have a number of ways of describing and using the quadrant framework. The two major approaches are quadradic and quadrivial. The quadradic approach involves an individual organism perceiving and understanding various aspects of reality by using or experiencing all four perspectives or quadrants. Reducing it to its most basic level, it is the "four irreducible ontological dimensions that all organisms have."[281] If the organism is a human, she is able to use various parts of her natural awareness, and established methodologies or practices based on the different quadrants, to investigate and understand various phenomena. Quadrivial refers to "four ways of seeing", or the perspectives related to each quadrant being directed at and used to understand one particular phenomenon. As opposed to a quadratic approach, where the inquiry is directed *outwards* from the individual to the various phenomena being experienced or observed, a quadrivial approach directs the four different perspectives or methodologies *inwards* at the particular phenomenon being investigated. Hence, it reflects "the four fundamental epistemological perspectives that can be taken on any phenomena."[282]

Returning to the example of the bodybuilder in Chapter One, if he took a quadradic approach to his workout he could use a heart rate monitor to record his objective physiological responses and would have a subjective physical experience of sweating and pain. He could experience the intersubjective mores and group-speak of the gym, where he may feel to be part of an important subgroup or culture of exercise. He could observe and map out, using natural ability or a sociological model (or both), the interobjective

[281] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 57 – 58.
Esbjörn-Hargens and Zimmerman, 'An Overview of Integral Ecology', p.63.
[282] *Ibid*., p. 58.

network of relationships and power structures in the gym and how they may relate to him and to the wider community. However, when the example of the bodybuilder was first provided it was very much a basic quadrivial approach: the four different perspectives or methodologies associated with each of the quadrants, that is, the quadrivia, were directed *towards* the person, as he was the object of investigation. It is important to note, though, that quadrants and quadrivia cannot be separated, as "ontology and epistemology are joined at the perspectival hip, opposite arcs in the same circle."[283] As I begin to explore below, the descriptions of the "What, Who and How" of integral ecology appear to overlap, as they exist and arise simultaneously. This will become more apparent in the following section, which expands upon the terrains, the niches and the ecological selves, and begins to show how these elements of integral ecology interact and affect and direct the modes of investigation and methodologies used to understand the natural world.

2.4 Integral Methodological Pluralism in Integral Ecology: The ecomodes

Wilber's development of Integral Methodological Pluralism recognises that there are at least eight methodologies for exploring the ontologies represented by the quadrants. This approach recognises that each quadrant can be investigated using disciplines that look at the *inside* or *outside* of that quadrant or holon; hence the eight methodologies. In integral ecology these are known as the eight ecological modes, or the ecomodes.[284] Before the expression of these modes in integral ecology is detailed, a brief background on Wilber's Integral Methodological Pluralism, or what he calls a postmetaphysical approach, will be provided. Integral Methodological Pluralism (IMP) uses a multiplicity of disciplines, practices and paradigms to map out the contours of any given situation or phenomena, environmental or otherwise. It has three precepts or principles. These are: *nonexclusion*, or a willingness to accept the claims various paradigms and schools of thought make which have been validated by those disciplines; *enfoldment*, or acceptance that some paradigms have transcended and included more aspects of reality and so are more comprehensive than others; and *enactment*, or an understanding that the phenomena revealed by various disciplines are dependent upon the influence of ontology and epistemology and the "who" that is the researcher.[285]

However, IMP goes beyond just the use of the quadrants and revises some of Wilber's earlier thoughts on and definitions of how the quadrants are manifested. Wilber went from initially viewing the Kosmos as being made up of holons, which are revealed to us through the four irreducible perspectives, to a view that the Kosmos consists rather of "the perspectives belonging to holons. To exist is to be a perspective."[286]

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[283] *Ibid*.
[284] Esbjörn-Hargens and Zimmerman*, Integral Ecology*, p.243.
Esbjörn-Hargens and Zimmerman*,* 'An Overview of Integral Ecology', pp. 63-66.
[285] Esbjörn-Hargens and Zimmerman*, Integral Ecology*, pp. 42-43.
[286] *Ibid*., p.64.

Although perspectivalism had always been a key part of integral theory, this renewed focus on the primacy of perspectives made Wilber realise that each perspective or quadrant can be investigated by other perspectives and thus "viewed *by* the inside or the outside within the quadrant," leading to the eight "native" perspectives associated with the quadrants.[287]

> Consider the 1st-person, experiential perspective represented by the UL [*upper-left*] quadrant. The 1st-person human perspective is the immediacy of what 'I' experience: my feelings, memories, thoughts, etc., which I can reflect upon. If I want to understand the structural features of my 1st-person experience, I can examine these very same thoughts and feelings from a 3rd- person perspective (I can study developmental models). My interior exhibits an exterior, which Wilber calls 'the look of a feeling.' I can evaluate the structure of my experience – including my developmental level in any number of lines (cognitive, moral, aesthetic, psychosexual, interpersonal). In other words, phenomenology studies direct 1st-person experience. Structuralism studies the 3rd- person structures and patterns of individual direct experience.[288]

Hence, the inside or outside perspectives of a holon in each quadrant are revealed by specific types of methodologies; one method cannot disclose aspects revealed by another. The eight native perspectives are able to account for the vast majority of the dominant groups of methodologies that humans have used over the past couple of thousand years. In some ways, integral theory and integral ecology are permutations of mixed methods research, which after the 1970s was adopted by many academics to answer research questions by considering a range of qualitative and quantitative approaches. Hargens briefly outlines the support for, and strong resistance against, mixed methods over the past century or so.[289] It is a historical tale of the battle between proponents of particular perspectives or quadrants; most notably between those who believe only an objective (or interobjective) approach can truly answer a question and those who embrace a subjective (or intersubjective approach), or who use both approaches to understand the world. I use Wilber's notation of the eight methodological families as eight different *zones.*[290] Each zone encompasses many different approaches to a particular perspective. In integral ecology, the zones and methodologies are known as the ecomodes, with two main ecomodes being used to explore the inside and outside of each quadrant or terrain.[291] When considering the selection of ecomodes to address an environmental issue, it is worth considering the unique epistemological challenges each terrain has posed in the past and how the ecomodes being considered tackled the problems then, or can tackle the problem at hand now. The following section briefly outlines the ecomodes used to understand each terrain from the inside and outside, along with specific examples related to Antarctic policy.

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[287] *Ibid*., emphasis mine.
[288] *Ibid*., pp 64-65.
[289] *Ibid*., pp. 245 - 247
[290] *Ibid*., pp. 247 - 261.
[291] Ibid., 247-250.

2.5 Integral environmental policy: The four terrains of Antarctica

In terms of policy development and political approaches to environmental protection, the area I believe is particularly suited to an integral ecological method is Antarctic policy. Antarctica and its subantarctic islands are unique in the world in terms of how they are managed and the approach that various sovereign states take to avoid exploitation. It is a place where the nexus of science, policy and politics often fuse closely; being recognised widely through the world as a pristine continent of science and exploration and, above all, a place of human cooperation. The following examples demonstrate the kinds of data and information that could be used to inform each mode in an integral ecology-based policy according to Edwards' meta-studies injunctions; that is, his four involvements of *method, data, interpretation* and *theory*.[292] The intention here is to demonstrate how, by drawing on IMP and EZI, I can construct a model for the development of an Antarctic policy that is based on the firm principles of integral research, Kosmic perspectivalism, and worldviews: methods and approaches, for example, proposed by Edwards, Divecha and Brown[293], Torbert[294], Annick de Witt[295] and Nicholas Hedlund[296], amongst others.[297] The Antarctic aspect is, therefore, the key 'real world' example to which I apply my IPT. However, any specific policy framework based on my proposed IPT model is likely to be more comprehensive and supported by the polity if integral principles are applied to policy, politics and democracy more broadly. Hence, the following examples focus on the *how*; the methodologies (ecomodes for understanding the two zones in each terrain) that would need to be included in a robust Antarctic policy, which, when combined with the *what* (ontology) and *who* (individual epistemology, stage of ecological consciousness or worldviews), could appeal to a wide range of people across cultures and states, and hence ensure that Antarctica continues to have strong protections in place well into the future.

The complexity of protecting and managing Antarctica requires leadership from individuals able to understand and integrate a diversity of approaches. This is already well understood by current managers and law makers who work in the field. Antarctica is a place where the study of the “it” and “its”, the objective terrains of behaviour and systems, takes an almost unnatural pre-eminence, but alongside that of both personal and collective cultural stories on Antarctic exploration; tales of traversing not only the physical, but the mental and spiritual terrain of the southern continent. There are also powerful stories and lessons about the interplay between science, policy and politics, such as those of the geologist Doulas Mawson. Past and present interactions with Antarctica, the facts it gives us about the complex ecology of the Earth, and a generally shared belief from all countries that Antarctica should be kept free from major

[292] Edwards, 'Towards an Integral Meta-Studies', p.178.
[293] Divecha and Brown, 'Integral Sustainability.'
[294] Torbert, *Action Inquiry: The Secret of Timely and Transforming Leadership.*
[295] Annick Hedlund-de Witt, 'Worldviews and Their Significance for the Global Sustainable Development Debate', *Environmental Ethics,* Summer 2013, Volume 35, pp.133-162.
[296] Annick De Witt and Nicholas Hedlund, 'Towards an Integral Ecology of Worldviews: Reflexive Communicative Action for Climate Solutions', in *The Variety of Integral Ecologies*, pp. 305-344.
[297] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 250

disturbance and development (at least for the foreseeable future), provides fertile ground for an integral approach.

Integral theory provides a framework that academics, policy-makers, Members of Parliament/Congress, and conservationists could use in their approaches to protection, use and management of Antarctica. The following example focuses on the *how*, or some of the methodologies an integrally-informed policy officer in a government department or university might use during the development of a leadership course on managing Antarctica. As well as setting tasks for the participants to complete, the framework presented could also be used to help analyse the success of the course and to improve it. The framework is set out so that the policy area is properly mapped, but *the map is not the territory*. It is structured so that every area is at least touched upon, but it doesn't preclude a greater focus on some areas rather than others. My own view on why critics of Wilberian integral theory sometimes err in their analysis is that they seem to think that each perspective is pulling equal weight. But that is not so. An AQAL analysis should also help reveal which quadrants require the most focus. It's a bit like a puzzle. The aim of AQAL is to get all the pieces of the puzzle and loosely construct a solution. Some parts of the puzzle are more important or even easier than others to work out. Some pieces are seemingly insignificant, but turn out to be critical, also requiring more attention despite their seeming insignificance. Not all of elements of the following integral Antarctic policy framework may be necessary, depending on the outcome required.

2.6 The Terrain of Experiences: Consciousness, experience and its structure

The Terrain of Experiences can be interpreted through first person modes of inquiry such as introspection, meditation or phenomenological approaches (Zone 1), or structuralism can be used to view and study this first person experience from a third person perspective (Zone 2); maps of developmental stages can be drawn by looking from the "outside-in."[298] Eco-phenomenology, based on the work of Merleau-Ponty[299] is one example of a Zone 1 ecological mode, as is the work of other phenomenologists, such as Abram.[300] Zone 2 ecological modes would include Marc Bekoff and Dale Jamieson's research on animal consciousness.[301] To cover off on one aspect of Zone 1 in the Antarctic leadership course, the policy officer could bring the experience of Antarctica closer to the high-level decision-maker. For the moment, focusing on the decision-maker, the policy officer could arrange for course participants to be provided with specialist training in introspective practices, with those open to doing so also becoming proficient in meditation. Ideally, this would be followed up by a visit to Antarctica (or one of the sub-Antarctic islands),

[298] Esbjörn-Hargens and Zimmerman*, Integral Ecology*, pp. 247 - 261.
[299] Maurice Merleau-Ponty, *The Primacy of Perception,* translated by J.E. Edie, Northwestern University Press, Evanston, Illinois, 2000.
[300] David Abram, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Pantheon Books, New York, 1996.
[301] Esbjörn-Hargens and Zimmerman*, Integral Ecology*, pp. 247 - 261.

or at least to a wild and remote place, so they could experience an internal voyage with new or reinforced mental and spiritual tools. This would be one of many possible methods. The niche experienced (in the integral ecological sense) would vary depending on the individual, but all of these stories and insights could be documented and shared between both the leaders and those they manage. For many, the experience would be largely a somatic or physical *and* a psychological or mental one: their internal mental struggle to ignore the biting wind, a physical sense of connection with landscape, or perhaps a new intellectual understanding of the logistics of managing the area. For some, it would touch upon the spiritual, stoked to fullness by remoteness and closeness to nature. Participants in the training and field trip could document their experience by keeping a simple diary, or by writing a paper on the need to have specially managed areas like Antarctica to "shore-up" our mental and spiritual health. Those participants who are open to, or practiced in, other more deeply introspective or meditative techniques may even have transformative experiences that fundamentally alter their developmental paths and relationship to nature. To cover off on one aspect of Zone 2, the participants could be the subject of a study that looks and describes from the outside where their ecological consciousness's "centre of gravity" (EZI's "ecoself') was before the Antarctic experience, and where it was afterwards. The way that interior expresses itself in external behaviour could be documented through a structural framework such as the decades-old worldviews approach of Gebser[302], or the contemporary version for this decade, as described by Annick De Witt[303] and Nicholas Hedlund[304].

2.7 The Terrain of Cultures: Shared meaning and collective developmental frameworks

The Terrain of Cultures can be interpreted through first person modes of inquiry such as hermeneutics (Zone 3) or third person modes such as ethnomethodology (Zone 4). One example of a Zone 3 ecological mode is environmental ethics, which uses a hermeneutical approach to explore the interior of human and animal cultures and the shared meaning and communication between humans, humans and animals or animals. This approach can be used to arrive at collective cultural views on what nature or wilderness mean.[305] Ethnomethodology describes the developmental and structural nature of these collective interiors from an exterior (but still subjective) perspective. For example, the structure of collective ecological worldviews could be described and mapped using such methodologies. Addressing Zone 3 in Antarctic policy could be achieved by an eco-hermeneutical approach that examines how the language of Antarctica is so overwhelmingly affected by the *place.* Although eco-hermeneutics can draw on shared indigenous knowledge of a place, Antarctica has only a recent history of use by humans, so we have taken our own customs, mores and ethics and imposed them on oral and written Antarctic traditions. As part of

[302] Gebser, Jean, *The Ever-Present Origin,* Ohio University Press, 1986.
[303] A Hedlund-de Witt, 'Worldviews and Their Significance for the Global Sustainable Development Debate**.'**.
[304] De Witt and Hedlund, 'Towards an Integral Ecology of Worldviews.'
[305] *Ibid*.

their experience, the course participants would also be required to read several books (or particularly pertinent extracts from those books) and write an account in either a factual scientific manner or fictional manner their own take on how the place has affected our stories and culture around it. Their collective behaviour around this task and the written outcome could be documented from the outside (Zone 4) by ethnomethodology. This would create an objective sociological analysis of how each participant structures and orders their relationship to Antarctica through the shared methods and practices of reading and writing; creating stories and language around the place Antarctica.[306]

2.8 The Terrain of Behaviours: Objective interior organisation of individuals and empiricism

The Terrain of Behaviours can be interpreted through third person modes of inquiry such as autopoiesis theory (Zone 5) and empiricism (Zone 6). The Zone 5 mode, autopoiesis theory "examines the inside of behaviour (an objective perspective using an inside approach to investigate individual exteriors) and is predominantly associated with the work of the Chilean scientist Francisco Varela and his work in cognitive science and biophenomenology."[307] Empiricism relies predominantly on the senses, enhanced by physical tools such as optics, to look at the outside behaviour of the physical, chemical, plant and animal worlds; zoology, biology, botany, physics, chemistry.[308] Autopoiesis theory, the creation of Francisco Varela and Humberto Maturana, could be used to look at how the consciousness of the participants in the Antarctic leadership course can be understood by mapping the physiological and biological structures in which this consciousness arises, but also (remembering that this is an interior, Zone 5, perspective of a physical domain) interpreting and examining our cognition through phenomenological methods.[309] The empirical zone is well covered through the many sciences studied in Antarctica: physics, chemistry, zoology, biology, and botany. Participants could pick an area as the focus for a short literature review, which could also incorporate insights from Zone 8 in the Terrain of Systems.

2.9 The Terrain of Systems: Interobjective interior organisation and systems theory

The Terrain of Systems can be understood through social autopoiesis theory (Zone 7) and systems theory (Zone 8). The former theory looks at the inside of collective exteriors using an objective approach. Examples include the work of Niklas Luhmann,[310] which was applied to the investigation of social systems

[306] Esbjörn-Hargens and Zimmerman*, Integral Ecology*, pp. 247 - 261.
[307] *Ibid*.
[308] *Ibid*.
[309] *Ibid.*
[310] Niklas Luhmann, *Ecological Communication*, University of Chicago Press, Chicago 1989.

by Geyer and Zouwen.[311] The outside of systems is in the purview of systems theory, which examines how the constituent parts of a system fit into the whole. Many types of ecology fall into this Zone. Each Zone has its own truths and injunctions, its own methods of gathering and analysing information. For example, using an empirical objective approach to describe a person's ethical behaviour does not enable us to reveal or fully understand what they subjectively experience as an individual. Such an approach also does not cut the mustard for understanding either the interior or exterior of cultures or systems. By using at least one, but preferably a range of, methodological approaches, a more inclusive and hence integral analysis can be completed. In this case, participants, or the adviser analysing the course, could map objective networks of social interactions and social forces from an interior perspective. Such an analysis could focus on the interior structures of communication that affect the social, political and economic systems through which we interact with Antarctica. The outside of the Terrain of Systems, or Zone 8, is accounted for by the use of general systems theory approaches, which looks at how the parts fit into the whole. Numerous approaches to ecology (such as population and landscape ecology) use this methodology. To incorporate this into the course, a short literature review could look at how the complex food webs (systems) in Antarctica are affected by climate responses (more systems), leading to a particular impact on the breeding of a particular bird species (an individual objective/empirical biological response). On the other hand, the participants could map out the contours of the complex political interplay between signatories to the Antarctic Treaty and how those external political manifestations affect the ability of the group participants to affect positive change in Antarctic management through their own institutions, whether academic, the public service, political offices, or environmental non-government organisation.

2.10 Development in the terrains: The Ecological Niches

Integral ecology incorporates the next element of the Integral model, *levels* or *stages,* by identifying three representative levels of complexity and development within each of the Four Terrains. Choosing three broad categories is merely a way of encompassing an enormous amount of complexity, as integral ecology recognises that a large number of levels or stages could be described in each Terrain.[312] The levels are indicative of an increase in the "interior depth and exterior complexity of phenomena."[313] The three levels in each Terrain engender what are known as the *Twelve Niches* of environmental concern. Each niche or domain of concern encompasses the primary focus or specialisation of particular fields of environmental endeavour; that is, the

> different aspects of reality that various environmental approaches specialize in. For example, *ecopsychology* specializes in psyche: the psychological dynamics of ecological grief (a sense of

[311] Felix Geyer and Johannes van der Zouwen, eds, *Sociocybernetics: Complexity, Autopoiesis, and Observation of Social Systems*, Greenwood Press, Westport, 2001.
[312] Esbjörn-Hargens, 'Integral Ecology: A Post-metaphysical Approach', p.312.
[313] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p.195.

> despair over damage to the environment) and disconnection from the natural world; *environmental justice* specializes in institutions and action: the relationship between social systems and intentional conduct; *eco-phenomenology* specialises in soma and communication: somatic realities and intercorporeal dimensions; Lovelock's *Gaia theory* specializes in movement and intersections: physical movement and natural systems.[314]

As noted in Chapter One, the levels are arbitrary and this also applies to the niches; like their ecological namesakes, they can be somewhat malleable and sometimes difficult to define.[315] Similarly, the "What, Who and How" of integral ecology appear to overlap, as the niches describe *what quadrant* is being looked at, but the What also obviously has a concordance with the How, or the kinds of methodologies being used. The Who, or the worldviews or level of development of those involved in an investigation also often dictate the methodologies used.[316] The levels across each terrain represent the ongoing unfolding of exterior and interior realities, with a trend towards increased complexity and inclusiveness of the less complex, but no less important levels or niches below them. As detailed in Chapter One, each new stage or level transcends, but includes, the components of its previous stage. The levels could also be classed as body, mind and spirit. The 'Twelve Niches' are shown in Figure 2.2. Each of the four domains or niches across a level represents one perspective on, or quadrant of, the same phenomenon. But one does not arise before the other; they manifest in reality at the same time, or tetra-mesh, as previously described. Changes in one will cause changes in the other. Hence the niches "co-arise" – they are not distinct or irreducible phenomena.[317] Although there is overlap between the What, Who and How, the stage or level of Who is doing the looking will be one of the main determinants of the What, or the level or niche that is enacted or realised.[318] The Integral Ecologist therefore:

> commits to holding all niches within their field of attention, because all twelve niches are present and available within each moment. The niches represent ontological entities, which are not independent of an observer though they might be independent of you observing them. Obviously, some situations require placing more attention on one or a few niches, but the other niches cannot be ignored or reduced to their correlates. Each niche is irreducible to any other and can only be fully understood on its own terms. Each niche has a tradition of experts (a community of the adequate) that have documented its contours and provided methods to access and understand its realities. The more niches that are acknowledged and included, the more sustainable any given project becomes.[319]

[314] *Ibid*., emphasis in original.
[315] *Ibid*.
[316] *Ibid*., p. 197.
[317] Esbjörn-Hargens, 'Integral Ecology: A Post-metaphysical Approach', p.313.
[318] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p.197.
[319] Esbjörn-Hargens, 'Integral Ecology: A Post-metaphysical Approach', p.314.

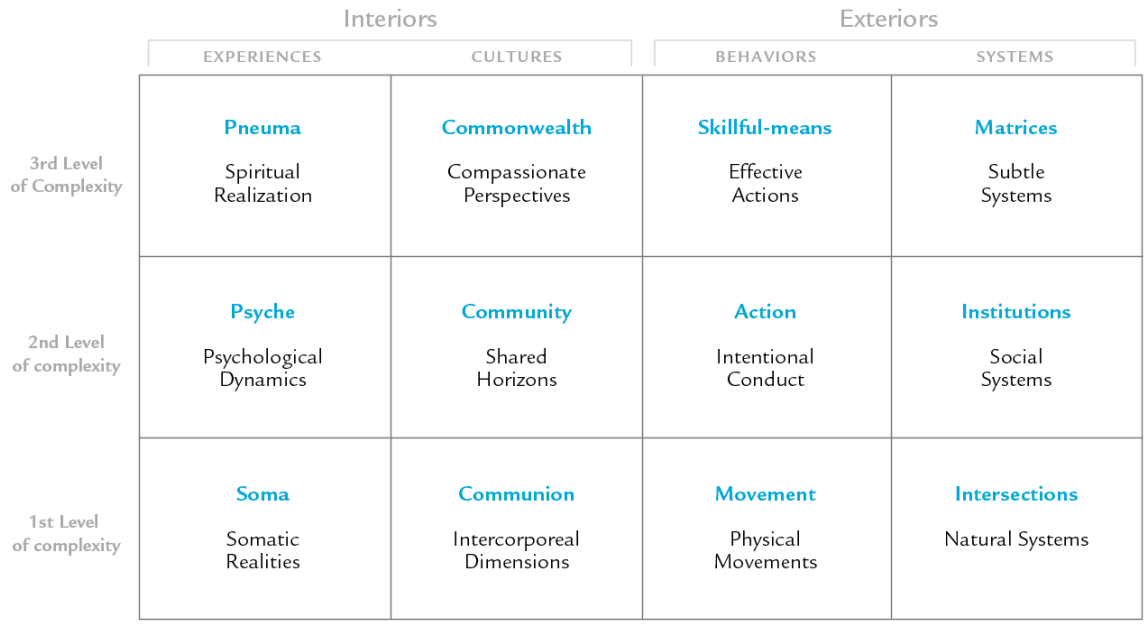

Figure 2.2 The Twelve Niches of Environmental Concern (from Esbjörn-Hargens and Zimmerman, p. 196)

The following section explores the twelve niches. While some of the niches represent actual environmental disciplines, others are more akin to a simple name for or description of a particular perspective. The descriptions of niches provided below note at least several schools of thought in each area, but only a handful are briefly considered. It is beyond the scope of this thesis to provide a great level of detail on all of the known ecological approaches. Esbjörn-Hargens notes that his exercise to document all of the approaches to ecology grew from a project of several hours to over a year, and at the end of this process he had listed some "two hundred unique approaches to and perspectives on ecology—most of which have their own journals, institutions, and communities of practitioners."[320] Hence the brief outline of the niches is provided to give a sense of the depth and breadth of the terrains and in particular to show how the stages or levels in each terrain can potentially be best understood. Where particular niches are utilised for an AQAL analysis later in the thesis, the relevant schools of ecology being used will be more fully explored. The following section provides further elaboration on the terrains and niches by using the environmental protection of the Antarctic and sub-Antarctic as an example, and how it could be bolstered using a policy framework that takes into account the niches of integral ecology. This example is not meant to be exhaustive and there are other components that could, and would need to be, considered in each niche to provide a truly integral approach.

The three levels or niches in the Terrain of Experiences, the interior of individual holons, are soma, psyche and pneuma. Soma is the felt experience of nature that is accessed through the living body. It is characterised by several schools of thought or categories, most notably eco-phenomenology, eco-

[320] Esbjörn-Hargens, 'Integral Ecology An Ecology of Perspectives', p. 268.

embodiment and architectural phenomenology.[321] Eco-phenomenology is predominantly based on the work of Merleau-Ponty[322] and a number of other phenomenologists, such as Abram.[323] Psyche is the psychological dynamics that link, or indeed separate, us from nature. It includes categories such as "ecoself" development, children and nature studies, environmental psychology, ecological psychology, ecopsychology, psychology and ecology and animal consciousness.[324] Ecopsychology studies the reasons behind our alienation from the natural world due to the trappings of consumerism and the grief we feel due to ecological destruction.[325] Pneuma represents a level or stage where a worldcentric and planetcentric perspective is gained. It includes categories that explore "the spectrum of spiritual realization and unitive experiences individuals at these levels have with members and aspects of the natural world."[326] The main categories in this niche are the ecological self and eco-spiritual writing. Approaches specialising in the ecological self posit that humans have the ability to expand their self-identity to include all of nature.[327]

The somatic realities of Antarctica can be particularly harsh, yet visitors' experiences are also often life-changing, as the pure physical challenge and visual splendour tap into a visceral part of our bodies. But it is not particularly easy to rely on this aspect to try to sway public opinion about the need to protect these places, as few will actually ever visit. To this end, educational facilities like the subantarctic plant house at the Royal Tasmanian Botanical Gardens in Hobart, Tasmania, Australia, can provide a brief somatic experience of what it would be like to step onto sub-Antarctic Macquarie Island for a period: cold air blasts onto your face; a fine mist suffuses the air; and the sound of penguins, albatrosses, skuas and seals fills your head. On the actual Macquarie Island itself, management authorities have made sure that visiting tourists do not have a somatic impact on the fauna a flora by constructing walkways and restricting them to certain sites. The psychological dynamics affecting our relationship to Antarctica are complex, and no short example can do them justice. However, the Psyche niche could be accounted for by using an ecopsychology approach. Antarctica could be used as an example of how an "unowned" and unexploited continent actually contributes to the psychological health and wellbeing, not only of those who study or visit it, but of humanity in general. Like all of the higher stages of development, the Pneuma niche would present a challenge to incorporate into a policy framework, as it represents a level where a worldcentric to planetcentric perspective is gained. In many ways, though, that makes it one of the most important to include. How could such a policy contribute to the development of an ecological consciousness or spiritual development? We would not want to increase visitation to Antarctica so much that it has a negative impact, and yet there may be some visitors who have transpersonal or other higher (state) experiences that

[321] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p.199.
[322] Maurice Merleau-Ponty, *The Primacy of Perception,* translated by J.E. Edie, Northwestern University Press, Evanston, Illinois, 1964,2000.
[323] Abram, *The Spell of the Sensuous*.
[324] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 199-200.
[325] Theodore Roszak, *The Voice of the Earth*, Simon and Schuster, New York, 1992.
[326] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 200.
[327] Warwick Fox, *Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism*, SUNY Press, New York, 1990.

lead them to developing worldcentric to planetcentric levels of self-development. Perhaps, as part of convincing decision-makers to maintain or even increase its protection, a small group of high-level leaders could be taken on an "Antarctic retreat". They could be tutored beforehand in a number of meditative or introspective practices to open them up to special states of consciousness. The states would pass, as states do, but the experiences would always connect them to their time in Antarctica.

The three levels or niches in the Terrain of Cultures, the interior of social holons, are communion, community and commonwealth. The Communion niche investigates those cultural practices that engender shared somatic experiences of nature. The main categories in this niche are environmental sensitivity and ecological intercorporeality.[328] Ecological intercorporeality draws on the philosophy of Merleau-Ponty and Whitehead, but focuses on the physical intersubjective facets of the relationships amongst and between humans and nonhumans.[329] The Community niche investigates the numerous worldviews that establish our sense of place and determine our relationships with nature. Categories in this niche include historical concepts of nature, nature and culture, sequential ecological worldviews, postmodern nature, continental philosophy and nature, critical theory and nature, interspecies relations, human geography, sense of place, process ecology, landscape studies, bioregionalism, ecoliterature, Ecofeminism, and environmental ethics.[330] The Community niche covers ecological schools of thought on the development of worldviews; postmodern philosophy; human interactions with landscape; the interplay between language and the natural world; language, gender and cultural power dynamics; indigenous ecology; relationships with and between animals; and ethical positions towards the environment.[331] The Commonwealth niche investigates the "shared worldviews of spiritual relations with the natural world and the Kosmos."[332] Categories include Ecofeminist theology, liberation theology, creation spirituality, ecology and religion, and transcendentalism. These schools of thought predominantly revise existing religious traditions so that they acquire an ecological basis.[333] An example of the Communion niche for Antarctica can be seen in the Antarctic festivals that are held in Hobart and other places around the world. While in the main these festivals celebrate human relationships and cultures related to Antarctica, they also have many events that are underpinned by strong natural experiences. For example, various artists who have travelled to Antarctica have created dances or works that are then shared with others who may never travel to that continent. On the other hand, such a practice could just involve a group of friends who in winter regularly walk to a place where they sit and quietly observe the colourful spectacle of the Aurora Australis. Such a practice is also likely to involve physical intersubjective interactions with plants and animals. An Antarctic Community niche would focus on human interactions with the Antarctic landscape through history and

[328] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 200 – 201.
[329] Catherine Keller, *From a Broken Web: Separation, Sexism and Self*, Beacon Press, Boston, 1986.
[330] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 201 – 202.
[331] *Ibid*., p. 201 - 203.
[332] *Ibid*., p. 203.
[333] *Ibid*.

how our views on the value of it have changed; from exploration and resource exploitation, to scientific research, to valuing it for the ecosystem services it provides to the planet and for its intrinsic value. The latter would not necessarily have to be based on purely factual material; it could also be expressed through legends or fictitious accounts of exploration and discovery. The Commonwealth niche would not be an easy component to incorporate, but inspiration could be sought from schools of thought that revise existing religious traditions so they have an ecological basis, such as liberation theology, creation spirituality, or particular schools of transcendentalism.[334] As part of an Antarctic retreat, seminars could be held by a number of spiritual leaders with experience in these schools of thought.

The three levels or niches in the Terrain of Behaviours, the exterior of individual holons, are movement, action and skilful-means. The Movement niche studies physical behaviours that are linked to nature and the natural dynamics of exterior processes. Examples include the physical and life sciences, the new biology, wilderness trekking and survival skills, environmental health and pollution.[335] The Action niche investigates conduct or behaviour that is driven by the need to benefit nature. Categories include eco-friendly behaviours, voluntary simplicity, environmental justice and eco-social action.[336] The Skilful-means niche investigates behaviours that arise from or create experiences of oneness with nature that are derived from worldcentric or higher stages and which encourage development to these higher levels. The main categories include outdoor or wilderness trips and pilgrimages, which feed and replenish a person's connection with sacred nature and planetary activism, thereby providing a global and spiritual underpinning for ecological activism.[337] This kind of outdoor experience is not just about the raw physical or mental skill needed to participate in such a trip, but may involve transpersonal experiences of nature. As is common with such states of consciousness, they come and go, but with consistent and long-term development, these temporary states may become permanent traits, or stages of development. The Movement niche could be accounted for within Antarctic policy through, for example, the study of atmospheric physics or the biology of marine mammals. The Action component is also similarly part of existing policy frameworks, as it involves behaviour to protect or benefit nature. Such external rules and behaviours would be manifest in regulations that prohibit feral species being brought to the continent or guidelines that limit the number of tourists visiting particular sites. The Skilful-means niche would be accounted for by encouraging - and providing the means for - moving to higher stages of development. The behaviours or practices taught to the decision-makers that were noted above would technically fall into this niche. Hopefully they would lead to them experiencing temporary planetcentric individual and collective

[334] *Ibid*. Creation spirituality should not be confused with creationism or (so-called) creationist "science," with the latter generally having a traditionalist or amber centre of gravity, often displaying unhealthy expressions of this worldview. A healthy expression of amber would be a traditional Christian harvest festival/blessing.
[335] *Ibid*., p. 204.
[336] *Ibid*.
[337] *Ibid*., p. 205.

states of awareness, which in turn become permanent traits, particularly if the practices were maintained for a long period of time.

The three levels or niches in the interobjective Terrain of Systems, the exterior of social holons, are intersections, institutions and matrices. The Intersections niche studies the exterior features of natural systems. Examples include the ecological sciences, systems and complexity sciences, and planetary ecology.[338] The Institutions niche investigates eco-social systems and institutions. Categories include sustainable development, urban planning, social theory, Marxism and ecology, green politics, environmental law, globalisation, environmental education, green architecture, and environmental history.[339] The Matrices niche investigates "worldcentric and planetcentric systems associated with the Earth."[340] There are few examples of such "consciously created post-formal systems". One approach is developmental systems ecology, which studies the holarchies in natural systems and how increasing complexity in each nested level of development results in greater amounts of information.[341] As the Intersections niche studies the exterior features of natural systems (collectives), such as the sciences of ecology and complexity, it is already a core component of existing Antarctic policy. Examples would include the study of the complex interactions between climate change and the ecological communities in the Antarctic. Equally, the Institutions niche, which accounts for investigates eco-social systems and institutions, is also a core part of Antarctic policy. An example would be the treaties, agreements and environmental laws on the use and management of Antarctica. As with all of the higher levels or stages of development recognised in the niches, the Matrices niche would be difficult to include. However, the inclusion of consideration of worldcentric and planetcentric systems associated with the Earth could be addressed by using developmental systems ecology.[342]

This exploration of the four terrains, IMP and the twelve niches - and the Antarctic-based examples - helps to demonstrate the wide diversity of ecological ontology across quadrants and levels, across the objectively- or subjectively-known body, mind and spirit of ecology. But while the niches offer a rich explanation of how reality unfolds across the quadrants, they do not take into account the worldviews, or the stage or level of development of those involved in an investigation or those being investigated (that is, the Who). The latter can strongly dictate both the realities that manifest (the What) and the methodologies used to explore these realities (the How). The following section explores these levels or stages in the development of ecological consciousness, which are known as the Eight Ecological Selves, or *ecoselves.*

[338] *Ibid*.
[339] *Ibid*., p. 206.
[340] *Ibid*., p. 207.
[341] Stanley N. Salthe, 'The Natural Philosophy of Ecology: Developmental Systems Ecology', *Ecological Complexity,* 2004, 2: 1 – 19.
[342] *Ibid*.

2.11 The spectrum of individual development and ecological consciousness: The ecoselves

Chapter One detailed how within each quadrant there are levels of growth or development and provided an example of the stages of moral development in the subjective individual interior, or Upper Left, quadrant. Integral ecology also recognises development through three broad categories in the four terrains, which arbitrarily creates the twelve niches. However, the niches represent the ontology of any phenomenon. For their use in the theoretical framework of integral ecology, they are intended to represent "What" is there. Integral ecology also considers the onlooker, or the person being studied; the "Who". The environmental approaches within the niches in the Terrain of Experiences (soma, psyche and pneuma) are the perspectives or disciplines best able to describe or investigate the interior realities broadly represented by the Who: individual somatic or bodily-based experience, the individual mind or psychological experience, and spiritual experiences. The Psyche niche, which represents the personal interior dynamics of our relationship to nature, provides a broad range of psychological methods and theories to understand how we are linked or separated from nature.[343]

Integral ecology uses a specific approach to describe a person's level of ecological consciousness, interior development, or worldviews on nature, the Eight Ecological Selves or ecoselves.[344] In this environmental approach, ecological consciousness is not meant to equate to the common phrase of being "ecologically conscious", which in its narrowest sense could exclude much of the population. Rather, it is meant to describe the relationship between humans and nature that is ever-present. It acknowledges that all humans have important positive and negative relationships with nature and can care for, or curse it, in their own ways. It recognises that each person has reached a unique stage or wave of development in terms of how they relate to the environment.[345] However, although each ecoself or ecological worldview is treated as a discrete stage of development, this does not mean that two people who have reached a particular level will have an identical relationship with or view of nature. One person may have reached a certain stage of development and demonstrate some of the traits of that wave of consciousness some of the time, but in the main express more of the traits of the stage below. On the other hand, another person reaching the same stage may express all of the traits of that stage of consciousness nearly all of the time. The complex nature of development is why in integral theory the levels or stages are also sometimes called waves. Another useful way to describe them is to say that in a particular line of development like ecological consciousness, a person will have a centre of gravity.[346] An example is provided in the work of Kohlberg, summarised in Chapter One. This splits the development of moral reasoning into six centres of gravity, which are derived from three broad groups: preconventional, conventional and postconventional.[347]

[343] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, pp. 199 - 200.
[344] *Ibid*., pp. 226 – 228.
[345] *Ibid*.
[346] *Ibid*., p.125
[347] Kohlberg, *The Psychology of Moral Development*.

Similarly, one of Wilber's several schemes representing the spectrum of consciousness (in this case cognitive development, with the descriptions of stages drawn in many cases from a wide range of sources such as Piaget and Aurobindo) includes nine centres of gravity, which are divided into three groups: prepersonal, personal and transpersonal:[348]

> Prepersonal centers of gravity – using the cognitive lines as a marker - begin with the undifferentiated or primary matrix (child in utero), and move to the sensoriphysical (first few months of infancy), phantasmic-emotional (first 2 years), and representational-mind (2 years and beyond, with onset of linguistic capacity). The personal centers of gravity include concrete operational (the prepubescent child internalizes rules and roles), formal reflexive (where the adolescent discovers that rules and roles are changeable and even conventional), and centauric/vision-logic (where some adults become capable of integrating mind and body, and entertaining several competing perspectives). Transpersonal centers of gravity include the illumined mind, intuitive mind and overmind. These levels include and transcend the limits of the personal centres of gravity.[349]

Figure 2.3 depicts a number of lines of development that individuals may proceed through, such as cognition, values, and self-identity, as identified by a range of authors. The worldviews line represents development in the Lower Left quadrant, the collective interior or the Terrain of Cultures. The figure aligns the various stages in these lines with a rainbow spectrum, using particular colours to depict the "altitude" of a level or stage. The use of a generic colour can help to "avoid the difficulties of using the terms of one developmental model (e.g. concrete operational cognition) to describe a level in another model (e.g. conformist self-identity)."[350] It could be quite possible for a person to have developed to a stage where they are can operate at a cognitive altitude of teal (middle vision-logic), but where their general centre of gravity is at green (early vision-logic). The latter is where most of their cognitive ability would sit. Given that individual lines can develop at different speeds, it could be possible for them to be at the cognitive altitude of teal while also having a centre of gravity that is orange for values and self-identity. It is important to note that it is not correct to say that a person *is* a colour, but more accurate to say that a person behaves in a fashion that is consistent with a colour.[351] "Green" in this context is not supposed to exactly equate to green politics or policy, although it will become apparent that there are many similarities. In fact, it is common for many "orange", or rational, scientific and managerial approaches to environmental policy to be labelled as "green", where they would not be so classified in the following model of development.

[348] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 125.
[349] *Ibid*.
[350] *Ibid*.
[351] *Ibid*., p. 126.

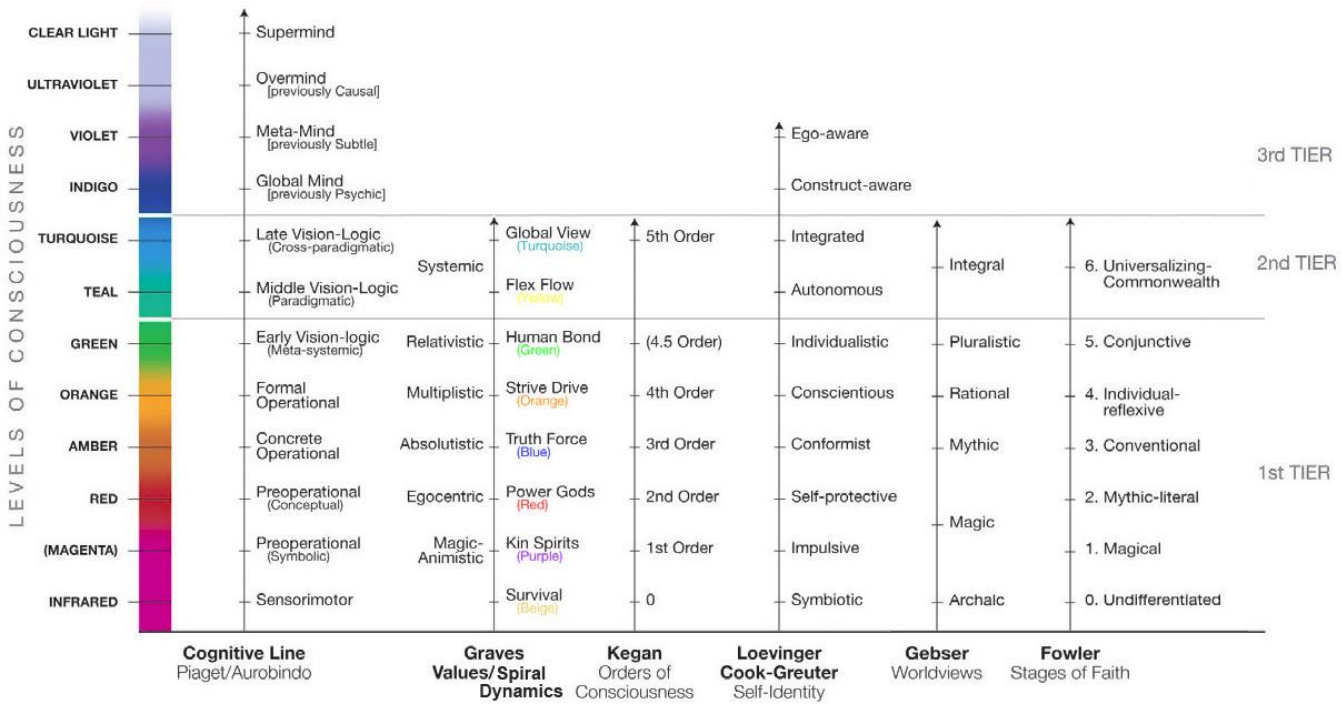

Figure 2.3 The spectrum of consciousness (from http://www.kheper.net/topics/Wilber/Wilber_V.html, accessed 25 June 2016).[352]

Although the lines do interact,[353] reaching a particular stage of development in one line is often contingent upon reaching one stage in another. However, integral theory introduces another method for grouping the centres of gravity. This is labelled the "tiers of consciousness", or first, second and third tier. People operating at first tier will nearly always identify with their own centre of gravity and treat other centres of gravity as lesser or misdirected.[354] Some of the levels within the first tier are shown in Figure 2.3. Each higher colour transcends, but includes, the components of its previous stage. However, unlike the infrared to amber centres of gravity, the orange and green stages are quite recent and "became significant only about three centuries ago in connection with the scientific, political, economic, social, cultural, and technological developments that made modernity possible."[355] Again, we are reminded that these levels or stages tetra-mesh or tetra-evolve. The Figure 2.4 shows the four quadrants in human development, and the general concordance between stages and levels in each quadrant.

[352] Jean Piaget, *The Construction of Reality in the Child: The International Library of Psychology,* Routledge, Abingdon, 1999; Sri Aurobindo, *Essays on the Gita,* Sri Aurobindo Ashram Press, Pondicherry, 2003; Clare Graves, *Levels of Human Existence,* translated by William R Lee, ECLET Publishing, 2002; Robert Kegan, *In Over Our Heads: The Mental Demands of Modern Life,* Harvard University Press, London, 1994; Loevinger, *Paradigms of Personality*; Melvin E Miller and Susanne R Cook-Greuter, eds, *Transcendence and Mature Thought in Adulthood: The Further Reaches of Adult Development*, Rowman and Littlefield Publishers, Lanham, 1994; Gebser, *The Ever-Present Origin*; James W Fowler, *Stages of Faith: The Psychology of Human Development and the Quest for Meaning*, Harper One, 1995.
[353] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 123.
[354] *Ibid*., 126.
[355] *Ibid*., pp. 126-127.

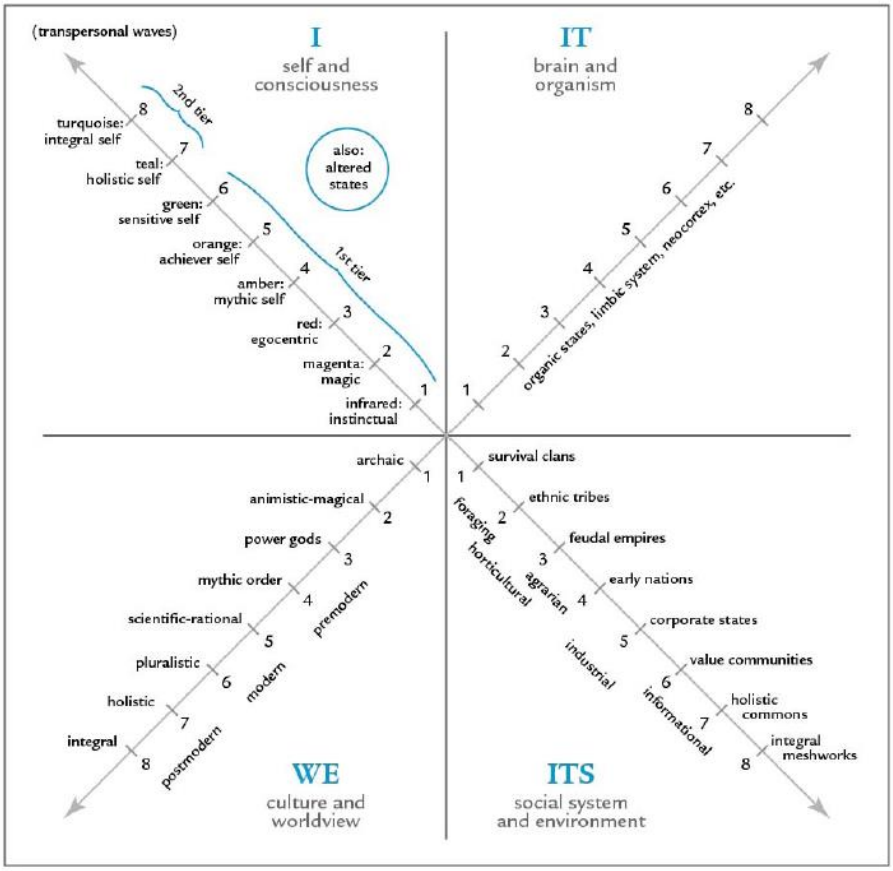

Figure 2.4 The four quadrants in human development (from Ken Wilber, 'Introduction to Integral Theory and Practice: IOS Basic and the AQAL Map', *Journal of Integral Theory and Practice,* 2006, 1(1), p. 25)

As well as individual centres of gravity, most modern societies have one or more dominant collective or cultural centres and adults will usually be at a stage that broadly reflects one of these centres of gravity.[356] Some adults will be at a stage that is above or below the cultural centre. For example, in the United States:

> no one center of gravity prevails; instead, there are three competing centres: traditional, modern, and postmodern. The first is the mythic or amber center, which includes evangelical and traditional Christians who worship a law-giving Divinity and who expect society to operate according to those laws. The second is the scientific-rational or orange center, which renounces (in principle, at least) the ethnocentrism of the mythic or amber center. Orange adopts the moral socio- and worldcentrism espoused by Enlightenment moderns, who emphasize that through rationality, individuals can obtain autonomy, exhibit responsibility, and achieve personal aims. The third is the relativistic or green center, which deconstructs the meta-narratives of Western science and makes room for multiculturalism, indigenous wisdom, new age spirituality, and environmental activism.[357]

A number of studies on the prevalence of these worldviews have shown that in the United States some 70 percent of the population are at amber to orange stages, while 25 percent operate at a green pluralistic level. Around 2 to 3 percent operate at the postmodern holistic or teal level, with smaller numbers operating at the turquoise, integral or the stages beyond.[358] People at second tier:

[356] *Ibid*., p. 127.
[357] *Ibid*., pp. 127-128.
[358] *Ibid*., p.128.

> No longer exclusively identify with any particular perspective. Instead they adopt an increasingly integrative multi-perspectivalism, which recognises the partial truth content, however limited, of more junior centres of gravity. Instead of eradicating orange rationality, as some green counterculturalists would prefer, or oppressing amber mythic belief, as some orange moderns want to do, second tier encourages healthy expression of all developmental levels without demanding that people vertically transform.[359]

Similar results have been found by a range of other researchers such as Willet Kempton *et al* and Paul Ray.[360] The third tier of development is attained by very few humans and includes transpersonal stages of development.[361] This tier is explained in the section on the ecological selves, and will not be discussed further here. However, before exploring the eco-selves, an example of the development of self-identity or ego will be provided, as this provides some of the base for the development of ecological consciousness. Given the primacy of holons with perspectives**,** it is no surprise that IT and IE have focused on the importance of an individual's ecological worldview and taking right ecological action at their own (healthy) level of development.

However, if this is done in the absence of a consideration of ontology and epistemology (what and how), it will not be a properly integral policy. Integral ecology recognises than a truly ecocentric or planetcentric approach cannot be achieved until a worldcentric approach is gained, and that as individuals (or indeed cultures) progress through the developmental stages or waves that it is not possible to skip stages without severe repercussions.[362] There are both healthy and unhealthy (or what Wilber calls "mean") expressions of each wave, which result in particular ways of thinking and relating to self, to others and to the wider world.[363] The worldviews affect the way people think and therefore have a profound influence on the *what*, or the reality that manifests for them, and also the *how*, or the methods they might use to understand the world. Wilber views each level or stage of consciousness as something of a blank canvas full of potential that acts as a space or "horizon of meaning", and in which the many developmental lines unfold. Cognitive development is seen as being necessary for progression through the other waves of self-development, whether morals, values or self-identity, and hence in IT is viewed as being one of the main precursors of "content" at each altitudinal level. However, it is important to note that while being necessary, development in the cognitive line by itself is *not sufficient* to ensure progression in the others.[364] Esbjörn-Hargens and Zimmerman provide an example of the development of self-identity in the first two tiers, and describe briefly how a person at each stage would relate to the problem of endangered species, given either healthy or unhealthy development.[365] The descriptions and examples of self-identity and the ecoselves are not intended to be restrictive or to exclude other interpretations of these complex

[359] *Ibid*.
[360] Willet Kempton , James S. Boster and Jennifer A. Hartley, *Environmental Values in American culture,* MIT Press, Cambridge, MA, 1996; Paul Ray and SR Anderson, *The Cultural Creatives,* Three Rivers Press, New York, 2001.
[361] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 140.
[362] *Ibid*., pp. 128-129.
[363] *Ibid*., p. 130.
[364] *Ibid*., p. 130.
[365] *Ibid*., pp. 130-140.

developmental streams. They are orienting definitions that recognise that "many approaches to the environment and their proponents can and do inhabit multiple sites of ontology, epistemology, and methodology."[366] They can therefore be extremely useful in understanding important ecological perspectives and, thus, to enhance communication and unity between proponents.

The first altitudinal level of first tier is infrared, or instinctual/symbiotic. The symbiotic self is best represented by the human infant, who is reliant on others for nurturing and is focused on constructing "a stable world of objects so as to separate from their surroundings."[367] An individual at this level is not capable of comprehending the idea of an endangered species. The second stage of first tier is magenta, or magical/impulsive. The impulsive self is ruled by the need to satisfy their basic requirements. It is best represented by children and some adolescents. Very few adults in modern societies remain at this level and if any modern groups of this nature do exist, their numbers would be extremely limited. The individual's needs at this level are particularly influenced by the long-standing rituals, traditions and superstitions of their community. Unhealthy or "mean" magenta manifests when "blood oaths, ancient grudges, strong ethnic identification, and an impulsive readiness for violence (although often ritualised) prevail."[368] Individuals at this level would not be able to understand the concept of an endangered species.

The third stage of first tier is red, or egocentric/self-protective. The self-protective self is still impulsive, not only to meet individual needs and desires, but also in the context of providing emotional scaffolding for an emerging sense of self and supporting longer-term goals. They "identify themselves in terms of will, ideas, and wishes" and as a rule are not able to reflect on themselves or others.[369] They are resistant to following group codes or traditions and tend to be unable to experience guilt for any action they take. However, people at this altitude have the emerging ability to view the world in a more realistic fashion, as opposed to the superstition or folklore that dominates the self-understanding of those at the previous level. They also distinguish much more strongly between self and other. Individuals at this level would be able to conceive of endangered animals, but would only be likely to support their protection "insofar as it gave them status or leverage toward their own self-serving goals."[370] An individual at this level, even one who has healthy development, could equally care nothing for endangered species. For example, a game hunter may hear of a species that is soon to be listed as endangered and take the opportunity to collect a trophy of this species before it is no longer possible to do so.[371] Unhealthy or "mean" red would view all forms of life, let alone endangered species, as things to be exploited wherever possible to gain personal power and status. This

[366] *Ibid*., p. 228.
[367] *Ibid*., p. 130.
[368] *Ibid*., pp.130-131.
[369] *Ibid*., p. 131.
[370] *Ibid*.
[371] *Ibid*.

may equally apply to humans. They are unable to conceive of the intrinsic worth of a species and the loss of a species would only cause grief or remorse if it impacted on their self-indulgent ambitions and goals.[372]

The fourth stage of first tier is amber, or mythic/conformist. The conformist self was touched on earlier; individuals who are rule-oriented and traditional, often unable to distinguish between self and the group to which they belong, having concrete belief in mythic realities, and rejecting those who do not respect their laws. This level is about the establishment of universal values, often provided through divine scriptures and prophets, which give meaning to life.[373] At this altitude:

> Coercive social power enforces codes of conduct based on eternal, absolute principles. By controlling personal impulses and living righteously, people are guaranteed a future reward. Everyone must assume their proper place in the social hierarchy, at the top of which there is an external authority whose commands must be obeyed. This authority can be God, the president, the king or queen, the czar, the leader, or the boss. Respect for the law and exercise of discipline are needed to build character and moral fiber.[374]

Although the scriptures that many of these groups operate from often include strong elements of a universalism, this unitive spirit is usually eclipsed by ethnocentric interpretations; that is, their view is taken to be the all-encompassing one. Individuals at this stage of development of self-identity may be concerned about and take action on endangered species not due to scientific interest in them, but due to the place those species hold as part of a greater tribal, political, religious or societal 'self.' Species can also be valued for their human-like traits, such as courage or faithfulness, which "have symbolic, allegorical, and inspirational value" or, in the case of individuals with an amber monotheistic viewpoint, endangered species can be valued as they are considered to be God's creation, and thus worthy of protection.[375] Unhealthy or "mean" amber often only cares about salvation for themselves and those who are like-minded. The holy word is interpreted as teaching domination rather than stewardship of nature in service to this nearly wholly anthropocentric approach.[376]

The fifth stage of first tier is orange, or achiever/conscientious. The conscientious self is focused on objective approaches to self-development and identity. They favour rationality in their striving for success and self-governance. While not disdaining emotions, they see the world as being something that can be measured and predicted. Although at its kernel, orange is competitive and self-interested, people at this altitude are able to empathise with others, showing concern that is independent of their own desires, needs or values. In the cultural collective perspective this is where culture develops from premodern to modern. Liberal capitalism is one of the dominant cultural expressions of this level. Even though orange individuals will "use strategy, technology, and competition to win," there is a kind of worldcentric approach in their sense of self. For example, they have a general view that everyone should have the same, or at

[372] *Ibid*., p. 132.
[373] *Ibid*.
[374] *Ibid*.
[375] *Ibid*., p. 133.
[376] *Ibid*.

least similar, legal rights and ability to enter markets.[377] The typical approach to endangered species would be an instrumental one, where they are valued for what they can contribute to individual or collective success and development. Orange individuals may champion free market incentives to protect endangered species, but would view payments to protect species as a right, rather than something people should do due to the intrinsic worth of that species. However, over time, certain orange individuals and collectives did begin to consider the moral and intrinsic rights of more than just humans. This is when a utilitarian environmentalism became a preservationist one and some approaches, such as that of John Muir,[378] began to border on a green pluralism.[379] Unhealthy or "mean" orange would view endangered species (and often other people) as a potential barrier to success and wealth, particularly where they get in the way of a project, and would only show concern if protecting the species benefited them financially or in some other way.[380]

The sixth stage of first tier is green, or sensitive self/individualistic. The individualistic self "emphasizes connectivity between people especially by sharing experiences, acknowledging contextual aspects of relationships (e.g. gender, class, race)" and

> because they are so sensitive to individual feelings they become strong advocates of community and egalitarianism. Also, because they are aware of the conditioning dynamics of culture and context, and because they take into account multiple viewpoints, those at the green level empathize with others and are willing to entertain alternative truth claims. Although they appreciate objectivity and logic, they tend to emphasize subjective and more holistic and organismic approaches to meaning-making.[381]

People at a green altitude reject unhealthy orange materialism, which often causes and legitimises environmental problems. They are against hierarchies, intuit the links between social exploitation and the exploitation of nature, and value all species, endangered and otherwise, for both their intrinsic and instrumental worth. They seek to protect nature along with bringing justice to all human societies and hence have a multicultural perspective that sees worth in the values and customs of all cultures.[382] As green is able to take on multiple perspectives and has a strong environmental ethic, it is not far removed from a second-tier altitude, particularly in its "healthy" expression. However, similar to other first-tier stages, people at the green level view their centre of gravity as being "best", and can be disdainful of individuals and cultures at other levels. This is particularly marked in unhealthy or "mean" green, which is often extremely critical of modern orange and seeks to undermine beneficial economic development. Mean green is also frequently condescending of traditional amber, which can undermine the importance of

[377] *Ibid*., pp.133 – 134.
[378] John Muir was one of the preeminent early advocates of preservationism and conservation in the United States. One of the earliest environmental activists, his efforts led to the protection of large wilderness areas in the US and the establishment of a number of national parks. He was the founder of the Sierra Club, a prominent American conservation organisation. See Max Oelschlaeger, *The Idea of Wilderness: From Prehistory to the Age of Ecology, Yale University Press, New Haven, Connecticut*, 1991, pp. 172 – 204.
[379] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 134.
[380] *Ibid*., p. 135.
[381] *Ibid*.
[382] *Ibid*., pp. 135 – 136.

this developmental stage that fosters the communal solidarity that is vital for a higher level of cultural evolution.[383]

Green is also generally anti-hierarchical, which in itself precludes demonstration that green is an advanced first-tier stage and hence deeper and more inclusive that other altitudes.[384] Wilber has been severely criticised by some green theorists for what they view as an attack on green values. However, he has emphasised the essential insights and contributions made by green and sought to bring attention to some of its potential failings, or ignorance of possibilities inherent in their own value system and other altitudes whether "lower" or "higher".[385] A defence of these criticisms of Wilber, integral theory and integral ecology is provided in Chapter Three. This will also address the green and postmodern suspicion and criticism of narratives of development and progress, much of it justified, but which is generally not applicable to IT in its most recent incarnations.[386] Suffice to say that green is an extremely important stage of development, as it is a precursor to second-tier.

The first altitudinal level of second tier is teal-holistic, or self/autonomous. The autonomous self is aware that reality consists of numerous and overlapping systems and contexts. Teal recognises that all levels or stages are essential if humans are to undergo healthy development in all lines: self-identity, values, cognitive, worldviews or the ecological self. Not only do they encourage and facilitate "healthy expression of all developmental levels without demanding that people vertically transform,"[387] they attempt wherever possible to integrate all centres of gravity (as opposed to rejecting or disassociating from them) by being "prepared to listen to everyone, to forge strategic alliances whenever possible, and to speak in ways that sincerely respect others."[388] They favour a transdisciplinary approach that is able to consider multiple perspectives to investigate, map out, and propose deep and innovative solutions to difficult problems. In short, they take a view that includes all the quadrants or terrains. This altitude is also known as "centauric" or "holistic aperspectivalism", a stage of self-identity and consciousness that enables them to comprehend reality from a number of different and often conflicting perspectives.[389] At this level, the holarchic nature of reality and development becomes apparent and this would be reflected in how they might deal with the issue of an endangered species. Decisions and actions are:

> based upon the situation and a perspectival view. Teal would ask questions such as: What species is at stake? What factors threaten it? Who are the stakeholders, in addition to the species and life forms in the species' habitat? What resources – material, monetary, social, cultural, personal – are available? What legal and regulatory issues come into play? How can we hear conflicting perspectives, so that more authentic dialogue can occur? What kinds of solutions have already been proposed?[390]

[383] *Ibid*., p.136.
[384] *Ibid*., pp. 136 – 137.
[385] *Ibid*., p.136.
[386] *Ibid*., pp. 142 – 143.
[387] *Ibid*., p.128.
[388] *Ibid*., p. 137.
[389] *Ibid*.
[390] *Ibid*., p.138.

Unhealthy or mean teal individuals may fall into existential despair over the shifting ground and the lack of an overarching and solid final truth. This can leave them floundering when trying to determine suitable solutions to problems. By proposing goals and solutions, but not becoming overly attached to the outcomes, teal can avoid this despair. However, given that so few people are at second-tier altitudes, the dark, unhealthy or mean sides of the stage are not as apparent, or indeed very well understood, by observers.[391]

The second altitudinal level of second tier is turquoise or integral self/integrated. The integrated self overcomes the despair of teal by becoming unattached to outcomes. Awareness of the suffering of nature and the world is dramatically increased, but the compassion that also arises with this altitude prevents turquoise from becoming either overwhelmed by this awareness or the numerous and often conflicting perspectives that can provide solutions. It recognises that divinity or spirit is present and interpenetrates "all beings at all levels in all quadrants" and that "nothing needs to be done, because everything is already perfect, which in turn paradoxically serves as the basis for a profound commitment to action."[392] To the integrated self, everything appears perfect, as "all phenomena appear as elements of the whole, not just the 'good' things, but also the 'bad' things, including industrial pollution, atomic weapons, logging, and burning carbon fuels. Divinity is present in everything at every moment. Having experienced this first-hand, turquoise-integral can also help generate conditions in which violence does not occur, in which species do not become extinct, and in which terrestrial life forms can prosper."[393] Understanding and experiencing the perfection of each moment does not mean that turquoise ignores or is uncaring about the positive or negative arising from actions, solutions or outcomes. It "celebrates joy and shows compassion for suffering."[394] A limited number individuals appear to have reached this stage of development and it is apparent that as a worldview or cultural perspective it has not become widely established. As Esbjörn-Hargens and Zimmerman note, turquoise would use an integral or integrated approach like integral ecology to find solutions to the issue of endangered species or other environmental problems. [395] This overview of the development of self-identity and the approaches of various altitudes to endangered species provides a natural step into an exploration of the ecological selves.

Many environmentalists would like to bombard the population with scientific information about the impacts of unsustainable (or even sustainable) development and rampant consumerism and hope that the constant barrage will change human behaviours. But by and large, the facts by themselves are not sufficient to change the way most people treat nature. This is because an ecocentric or planetcentric perspective cannot come into being until a worldcentric approach is gained. And a worldcentric stage

[391] *Ibid*., p.139.
[392] *Ibid*.
[393] *Ibid*., p. 140.
[394] *Ibid*., p. 139 – 140.
[395] *Ibid*., p. 140.

cannot occur until the preceding egocentric and ethnocentric waves of development are reached, transcended and included in each following wave. We cannot skip developmental stages and in this our individual and cultural attitudes to nature are no different. By taking into account both psychological and cultural developmental dynamics and encouraging healthy development at each level, integral ecology can make its messages appeal to a wide audience. Hence, it is able to resonate with people at a number of levels, particularly at amber and above, to become engaged in preventing and solving environmental challenges.[396] Being able to hold multiple perspectives also leads to the creation of shared spaces of individual and collective understanding between and within levels, which is essential for solving environmental problems. As we have seen, the kinds of capacities that are the foundation of second-tier waves of development and the integral approach begin to manifest at the green altitude, although this wave is still somewhat hampered by its focus on partial perspectives. A green approach is extremely useful and has achieved extraordinary things for environmental protection, but it cannot provide comprehensive solutions. By promulgating a second-tier methodology and second-tier ecological consciousness or self identity, integral ecology "acknowledges interior and exterior realities" and commits to "exploring developmental psychology and its relationship to the self (subjectivity), culture (intersubjectivity), and nature in both individual organisms (objectivity) and the systems of which they are members (interobjectivity)."[397]

Esbjörn-Hargens and Zimmerman provide an excellent overview of the research to date on the relationship between interior development and perspectives on ecology or nature, which points towards the potential existence of a number of ecological lines of development. Furthermore, they indicate that existing lines of development may have their own unique ecological variants, or that at the least the already established lines have particular environmental expressions at each stage or level.[398] The following section distils one outcome of the research by detailing Esbjörn-Hargens and Zimmerman's model of ecological or environmental self-identity, the ecoselves. The ecoself or environmental identity line is based on Cook-Greuter's research on the development of the self-identity line, which was previously explored. Whether the ecoself line is a new and distinct line of development does not detract from its value for describing and understanding the *who* of integral ecology.

> Cook-Greuter identifies at least eight basic levels of development that arise individually and collectively. Each level corresponds to an ecological self. These selves represent the various ecological perspectives that can exist nonexclusively within all individuals. Most people embody multiple identities, while others are more embedded in a single perspective. A growing number of integrally aware individuals are able to relate to all eight of these perspectives. *Different ecological selves tend to gravitate toward different aspects of the natural world and often prefer specific methods of investigating or making contact with nature. Each ecoself has a unique way of relating to itself, others and the natural world.*[399]

[396] *Ibid*., pp.215 – 216.
[397] *Ibid*., p. 216.
[398] *Ibid*., pp. 216 – 226.
[399] *Ibid*., p.226, italics mine.

As with any stage or level of development, each ecoself has its good and bad, its healthy or unhealthy aspect. They relate to the environment in a way that matches with their ecological worldview. Regardless of their level or tier, they are capable of damaging nature, and one level is not always more caring for the environment than another.[400] An outline of the ecoselves is provided below, along with examples that could be applied to Antarctic studies or policy.

The first ecoself is the eco-guardian, known as the romantic ethos. This magenta stage of environmental identity is characterised by views of nature as good against evil, where the focus is on establishing safety and ensuring the satisfying of basic needs. In relation to the environment they may strive to restore an ecological paradise lost. Few modern adults have this ecoself as their centre of gravity. However, a number of views on the environment, such as some schools of Romanticism, are underpinned by a yearning to return to the time before the "fall". This is not necessarily to say that romantic practitioners themselves were or are this level, but that many glorified this particular perspective.[401] The period of history in which this separation from a time of environmental purity is supposed to have occurred differs depending on the environmental school of thought: for some deep ecologists it happened with the introduction of horticulture, for some ecofeminists, agriculture, or for some social ecologists, industrialisation. This stage is quite tribal, deploying long-standing rituals, traditions and customs to commune with nature. People located here venerate their elders and respect the ability of shamans to connect with nature and the spirit world. The eco-guardian can be seen in *some types* of Deep ecology, Gaia and nature worship, and Ecofeminism.[402] A "purely" Antarctic eco-guardian would be rare in the general populace. This centre of gravity would, however, be strongly expressed in Antarctic explorers/survivalists of the present and past (see also eco-warrior below). The guardian is the raw survival instinct, honed more in some than others, and needed to carry out great feats of endurance, fortitude and survival. One only has to read of Mawson's tragic expedition to King George V Land and his story of survival, to know that some version of the eco-guardian drove both him and his heroic teams.

The second ecoself is the eco-warrior, or the heroic ethos. This red stage of environmental identity is dominated by an impulsive personality, which is not only used to meet immediate needs, but is used to establish a strong sense of self. Like the eco-guardian, they view things as black and white, although their strong sense of self and other, and ability to view the world in a more realistic fashion, means that they usually resist tradition and custom in favour of their own self-serving goals. In terms of nature:

> Eco-warriors take a heroic approach... They focus on the assertion of the self over the system or nature. They are driven by impulsivity and immediate reward. Leaders establish themselves through power and strength. They often have a 'to hell with others' attitude. They emphasize obtaining power and not being constrained. They desire respect and have an appreciation for the 'law of the

[400] *Ibid*., p. 227.
[401] *Ibid*., pp. 228 – 230.
[402] *Ibid*., p. 230.

> jungle' and 'nature red in tooth and claw.' They have a macho quality that feeds a heroic images (sic) of themselves as one person against everything. They highlight toughness and their groups are often ganglike. They value 'hands-on', 'survival', and 'street' skills.[403]

The eco-warrior is apparent in parts of the EarthFirst! ethos, monkey wrenching and 'ecotage', and extreme sports such as rock and mountain climbing. The Antarctic eco-warrior would also be in Mawson, but also equally be expressed in a member of a Sea Shepherd crew.

The third ecoself is the eco-manager, which is also called the stewardship ethos. This amber stage of environmental identity conforms to traditional norms and values. Sense of self is in relation to the group, so a 'them' versus 'us' attitude is common. Their approach to nature is one of stewardship, of dominion over or strong responsibility for the earth laid down either by a literal interpretation of divine scripture, human-made laws, or a combination of both. Power over nature is vested in an authority of some type and those who follow the laws are rewarded. The ethos of the eco-manager is strongly expressed in many pieces of environmental legislation, scouting, various approaches to wildlife management and several Christian approaches to environmental protection,[404] although there are other approaches to stewardship that are more complex and nuanced.[405]

The fourth ecoself is the eco-strategist, or the rational ethos. This orange stage of environmental identity is underpinned by a scientific, empirical and objective approach to nature. Although focused on rationality, it is cognizant of the emotions of themselves and others and value others humans for their intrinsic worth. They understand, and in many cases will champion universal human rights.[406] They value autonomy, independence and competition, are believers in the invisible hand of the market, and are strong supporters of technology and progress. The eco-strategist is seen in some aspects of natural capitalism, some conservationists, environmental pragmatism, environmental psychology, and the objective ecological sciences.[407]

The fifth ecoself is the eco-radical, or the equality ethos. This green stage of environmental identity is "an individualistic self who highlights how we are all connected through similar experiences, shared contexts such as race or gender, and various systems (e.g. political and ecological). Eco-radicals are sensitive to people's experiences and are willing to consider contradictory truth claims. They supplement objectivity and logic with subjective and more holistic approaches."[408] The eco-radical has a postmodern view of nature. They fight against the domination of both humanity and the environment, engaging in activism to suppress and remove unhealthy hierarchies and power structures. They promote social responsibility and

[403] *Ibid*., pp. 230 – 231.
[404] *Ibid*., p. 231.
[405] R.W. (Bill) Carter and Helen Ross, 'Are We Ready to Embrace Stewardship?', *Australasian Journal of Environmental Management*, December 2012, Vol. 19, No. 4, pp. 207-212.
[406] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, *p. 231.*
[407] *Ibid*., p. 232.
[408] *Ibid*.

tolerance, and give a prominence to the interiority of beings and cultures that is rare in the previous eco-selves. The ecoradical worldview is a postmodern view and can, more than any other stage of ecological consciousness, appreciate and use an integral framework.

Ecoradicals, whether deep ecologists or ecofeminists are able to consider contradictory truth claims, and ecological perspectives that differ from their own. Deep ecology's respect for many "total views" shows the maturity of its perspective. But, as with any stage of development, there are unhealthy aspects. Ecofeminists, deep ecologists and some of the environment movement can also fall prey to the "mean" green meme. They will be overly critical of ecostrategists and the methodologies they use, on the basis that this orange ecological consciousness is dominated by an empirical /managerial approach to nature. They view this as a failure to accept the disaster of modernity, while at the same time, particularly if they are in a very "mean" frame of mind, ignoring the incredibly emancipating effect that the dignities of modernity had on society. Likewise, they can be scathing of the amber ecomanager, whose approach is one of stewardship (or domination) inspired by divine scripture and human laws. The former is sometimes condescendingly dismissed and the latter viewed as being too weak or deficient by the ecoradicals. Examples of the ecoradical include aspects of deep ecology and ecofeminism, ecocentrism, Abram's ecophenomenology, and Green politics.[409]

The sixth ecoself is the eco-holist, or the holistic ethos. This teal stage of environmental identity, which is the first of the second-tier, is the autonomous self, aware of the many overlapping systems and contexts within reality. They understand the need for a multitude of values and perspectives, even those that are contradictory to their own, and hence "are capable of holding conflicting truths."[410] They replace hierarchies with holarchies and understand the part truth and value play in all perspectives, in all quadrants, all lines, and all levels, and hence in all terrains, and in all niches. They respect and prefer leaders and authority figures who are able to hold multiple perspectives. The holistic ethos is seen in Teilhard de Chardin's noosphere, the Gaia hypothesis, some system sciences, Aldo Leopold's land ethic, and process ecology.[411]

The seventh ecoself is the eco-integralist, or the inclusive ethos. This turquoise stage of environmental identity, which is the second of the second-tier, becomes ever more open and aware to the suffering of the world and nature, but the enhanced compassion that arises with this stage prevents the existential angst that can occur with the eco-radical and eco-holist. They recognise that "no ecological reality lasts forever, thus they appreciate each phenomenon, without clinging to a view of how it should be but working hard to change things for the better."[412] Examples of the inclusive ethos include Bhutan's "Middle Path" to

[409] *Ibid*., pp. 232 – 233.
[410] *Ibid*., p. 233.
[411] *Ibid*.
[412] *Ibid*., p. 234.

development and integral ecology. As the holist and integralist approach are newer stages of development, they are sometimes confused with each other or combined into one level or perspective. However, there are a number of distinctive differences between them. These are explored in Chapter Three as part of the defence of integral theory and integral ecology as the differences revolve particularly around the nature of their multiperspectivalism, which has some bearing on the academic and methodological rigour that can be brought to an integral approach.

The eighth ecoself is the eco-sage, or the inclusive ethos. This includes indigo or higher stages of environmental identity that fall into the third-tier. The eco-sage has a truly transpersonal perspective that transcends and yet incorporates the other eco-selves. Like the holist and integralist, they are able to use and integrate a wide range of ecological approaches to help humanity and the planet, but have learned and intuited both the limits to cognitive maps of reality and how to recognise and accept paradox.[413] Like the other second-tier identities, they also have an extensive understanding of the complex nature of development across experiences, behaviours, cultures and systems. However, their increased ability to self-identify with members of the natural world, including humans, means that they fully accept the range of ecoselves expressed in people without prejudice or expectation. The eco-sage is well named, as these ego-aware individuals have a permanent ability to experience a number of unitive states with nature across all levels of development and manifestation. This stage "becomes even more of a transparent manifestation of Being, completely spontaneous and open. Ecosages have stable access to transpersonal realities such as the capacity to witness their experience and keep their boundaries open. They view others as manifestations of Being-Spirit. They experience the world as an immanent expression of timeless Spirit."[414] Examples of the eco-sage include St. Francis of Assisi's Canticle of brother Sun, Ken Wilber's Eco-Noetic Self, Joanna Macy's ecological self, McClellan's nondual ecology, and Warwick Fox's transpersonal-ecological self.

It should be emphasised that the line of the ecoselves is just a basic map that shows how the ecological self or environmental identity develops in train with well-defined and well-researched levels of psychological development. An individual whose centre of gravity is at one level can still use approaches from their own or other higher or lower levels to provide a basis for their own or other environmental action. As an example, "the rhetoric of Deep ecology, which is listed as an example under the eco-radical, can be used to justify neo-pagan rituals (magenta worldview), monkey wrenching (red worldview), environmental legislation (amber worldview), natural capitalism (orange worldview), and social activism (green worldview)."[415] Deep ecology or other environmental approaches have one centre of gravity or ecoself that

[413] *Ibid*., p. 236.
[414] *Ibid*. As noted in Chapter One, various states of consciousness can be experienced and these can mirror almost any type of developmental stage. Regardless of the ecoself that characterises a person, they can experience any number of unitive states, but these do not persist and generally only become permanent through further development. The interpretation of these states also occurs through the lens of their ecological centre of gravity. (*Ibid*., pp. 236 – 237).
[415] *Ibid*., pp. 237 – 238.

tends to be more prevalent than others. There can of course be various approaches within each school, which is why some of the schools of environmental thought are noted as examples in a number of the eco-selves.

Looking back at the example of the Antarctic leadership course**,** a study could be carried out which describes how, before the wilderness trip, a group of senior executives mostly had ecological worldviews heavily influenced by an eco-strategist, or rational approach to the environment. This stage of environmental identity is underpinned by a scientific relationship to and understanding of nature. A group aware of its own and others emotions, it values humans and parts of nature for their intrinsic worth. They tend to champion universal human rights, value autonomy, independence and competition, are tend to be strong supporters of technology and progress. Around this general ecological bearing, some participants would also have leanings towards an eco-radical, or postmodern, view of nature. This is characterised by their willingness to fight against domination of humans or the environment, possible involvement in activism, promotion of social responsibility and tolerance, and an understanding at least at a theoretical level that beings and cultures have interiors that must be understood and honoured. On the other hand, some of the participants would be just as heavily influenced by an eco-manager, or stewardship ethic. This ecoself conforms to traditional norms and values, with sense of self being in relation to the group. Their stewardship, dominion over, or strong responsibility for the Earth is generally underpinned by a literal interpretation of divine scripture, human-made laws, or both. The ethos of the eco-manager is strongly expressed in many pieces of environmental legislation, and a number of Christian approaches to environmental protection. This could be described as the general "constellation" of ecoselves shared by many in the group.

A good smattering of the other ecoselves would also be mixed with this; for example the eco-warrior, or the heroic ethos, asserting itself over the system or nature. A small number of individuals may be influenced by the ecoself known as the eco-holist. This is first of the second-tier eco-selves; it is the autonomous self, aware of many overlapping systems and contexts within reality, and aware of the need for a multitude of values and perspectives. After the wilderness experience (particularly where the introspective techniques are practiced continuously after the experience and into the future) it is possible that major shifts could occur in the individual's ecoself constellations and some of the higher stage ecoselves could become more prominent. On the other hand, some may just shore up a "healthy" expression of their dominant ecoself. For example, a deeply religious participant may reinforce their sense of stewardship and need to care for nature. This transformation could also involve that individual actually being able to take a second-tier approach to some ecological issues. If they also make the leap to a higher-stage self, they may now view Antarctica as a pristine example of God's creation, where a complex nexus of biological and geological processes meet a strong cultural agreement across many nations that the continent should not be over-exploited; along with a personal view that what we learn in Antarctica is

nature's/God's way of warning us that we need to change to protect Creation. So we can individually document the interior and its experience in nature through phenomenological inquiry and introspection. The presence of this kind of ecological/sustainability spectrum in leaders has also been demonstrated by Simon Divecha and Barrett Brown and other researchers on cognitive development and worldviews.[416] While the consideration of a person's line of development of ecological consciousness is of great utility, it should be noted that more investigation is required to further integrate developmental theory with ecological worldviews. As Schein notes, EZI is one of few ecological worldview frameworks available, but it "needs to be refined further by empirical research."[417] Having provided an overview of Wilberian integral theory, of the integral ecology of Esbjörn-Hargens and Zimmerman, and having pointed towards other integral ecologies that could also be utilised, I am now in a position to present a theoretical model which adapts EZI for policy, politics and democracy applications more broadly: the Integral Policy Tryptic of *Person, Polity, and Planet*.

[416] Divecha and Brown, 'Integral Sustainability'; A Lukasiewicz, P Davidson, GJ Syme and KH Bowmer, 'How the Social Construction of the Environment Affects People's Reactions to Water Policy', *Australasian Journal of Environmental Management*, 2013, 20:3, 179-192; Nick Emtage, John Herbohn and Steve Harrison, 'Landholder Typologies Used in the Development of Natural Resource Management Programs in Australia—A Review', *Australasian Journal of Environmental Management*, 2006, 13:2, 79-94; Katrina S. Rogers, 'Exploring our Ecological Selves within Learning Organizations', *The Learning Organization*, Vol. 19 No. 1, 2012, pp. 28-37.
[417] Schein, *Ecological Worldviews and Post-Conventional Action Logics*, p. 22.

3. The Integral Policy Triptych: *Person, Polity and Planet*

3.1 Integral policy, politics and democracy

> Integrative metatheorising is an ambitious project. It is based on the premise that the critical appreciation and integration of diverse theoretical and methodological perspectives offers a new way forward in the development of science. It seeks to find insights through the connection of knowledge rather than the specialisation of knowledge. It takes an appreciative rather than a depreciative view towards systems of knowledge, irrespective of their place within the mainstream or the periphery. The big pictures that emerge from this process stand in contrast to the goals of mainstream social science which are almost exclusively concerned with the building and testing of middle-range theory.[418]

In Chapter Two I explored the "what", or ontology and the "who," or the observer (or individual's epistemology), and the "how" (methodology) of integral ecology, and explained how this node of integral thought was based on Wilber's integral theory. This brief primer on integral ecology indicated that with any environmental phenomena there is a complex interplay between ontology and observer, which reaches higher levels of interaction and complexity with the introduction of the third element. The third essential prong of any integral research is the "how", or methodology; broadly, the disciplines and fields of endeavour that we choose to understand particular environmental and ecological realities. A pointer to these methodologies was provided in the descriptions of the ecological terrains and niches. The niches are ontological entities; they are '*what is there*.' But while many of these entities are revealed through natural ability (for example, 'straight' perception) or other native perspectives, some have only become apparent through the development of specific methodologies. Many of these methodologies obviously use natural abilities, but only become useful and provide effective understanding of a niche through training and education in particular disciplines or fields.

As Esbjörn-Hargens (and Wilber) puts it, each niche "has a tradition of experts" or "a community of the adequate" who have developed methods to "access and understand its realities."[419] In a broader sense, the "how" is the epistemological aspect of integral theory. Although we are seeking to honor all approaches, there is still the question of what constitutes valid knowledge. Foremost among those able to answer such questions are the communities of the adequate. The apparent increase in complexity of the integral approach through the introduction of this third element may at first appear to serve only to make the theory more inaccessible. However, in many ways it merely reflects the fact that the further we explore nature and the world, the more complex they become. It also underpins the foundation stone of the integral approach that if we don't take an all quadrants, all levels all lines approach that we are not accurately reflecting things as they are, or could be. In Chapter Two I gave an overview of the kinds of disciplines and research activity that would populate each of the two zones, those broadly ecological in nature and then specifically on Antarctic issues. These disciplines and perspectives - these middle-range theories - are the data that is entered into the Wilberian Integral Operating System, into Edwards'

[418] Edwards, Towards an Integral Meta-studies, p. 174.
[419] Esbjörn-Hargens, 'Integral Ecology. A Post-metaphysical Approach', p.314.

injunction of method, data, interpretation and theory. While I have outlined much of the method to be used through my exploration of Wilberian integralism, and the EZI interpretation of IMP, I will present in this chapter my own take on these integral approaches known as the Integral Policy Tryptic (IPT).

Governments of any almost political persuasion could use the IPT for policy and to inform their politics and relationships with people, polities and the planet. Having said this, I personally believe some of the underpinning philosophies of the more progressive parties may make a more suitable partner. For example, a conservative political party driven by a mythic or amber worldview, where stewardship of nature can often exist side-by-side with a more arrogant sense of dominion over the Earth, would be unlikely to be able to comprehend any great benefits from such frameworks, although they would recognise some of the core elements as being useful, particularly the scientific aspects. If they were to use it - for example by sending decision-makers on the Antarctic leadership course wilderness trip - they may even have very positive higher state/stage experiences that they could interpret as "God has shown me His creation in a pristine condition and it's my responsibility to help protect his Creation," (a healthy orange eco-manager expression.) On the other hand, a member of a progressive, light green party, would be much more likely to actively engage with such a course, and indeed is likely to believe that the conservative individual could gain much from participating.

That brings me back to the one of the tenets of this thesis: that until green and progressive parties undertake an integral "reimagining" of their base philosophies, policies and communications strategy, greater electoral support will either not eventuate or it will take longer; with more schisms and poorer environmental, social and economic outcomes. If an integral state arises, it is likely that a green or progressive politics of some form could be its common ancestor. However, it is unwise to dismiss the possibility of a form of the integral ecological state that is heavily based on a conservative philosophy and politics. Indeed, if we are to address complex ecological problems we need to honour and use "healthy" environmental solutions from all sides of politics and all sides of the ecocentric and anthropocentric ecological divide. This doesn't mean that an integral approach will be necessarily bipartisan or consensual, although this could be more likely if integral principles are applied effectively. If integral theory is to be of use though, it also needs to help us navigate the realpolitik of a situation. But as anyone who has worked in politics knows, the brutal bludgeon of the numbers, gut instincts and grey (or near-grey)-haired media experience often overweighs any policy niceties. These kinds of "headkicking" political decisions will always be a part of the landscape. Despite this, political parties are capable of making “healthy” decisions around environmental policy, even if those decisions are electorally expedient. Rejuvenation of the political process in both progressive and conservative politics is also recognising the need for parties and politics underpinned by the triune of strong grassroots activity (or "free association" for the conservatives)[420], sound policy, and quality candidates. Even quality candidates who become elected representatives can

[420] Roger Scruton, *Green Philosophy: How to Think Seriously About the Planet*, Atlantic Books, London, 2012.

make bad decisions, but with an integral framework informing the grassroots, the policy, and the person, I believe that sounder decisions can be made, regardless of political stripes. However, it must be acknowledged that, at least in Australia at this point, the political party most likely to adopt integral approaches would be the Greens. This is because at least broadly, the members of social holons making up the party and the environmental movement have ecostrategist or ecoradical (and ecoholist and ecointegralist) centres of gravity. In other words, they have a healthy respect for policy underpinned by rigorous science, which is also often combined with a postmodern view of nature and (at least a beginning of) willingness to accept a range of contradictory truth claims about the environment. Those individuals who embody a holist or integralist approach understand the need for a multitude of values and perspectives, even those that are contradictory to their own. However, higher altitudes of ecological consciousness will not necessarily be strongly expressed within existing social holons.

As Michael Schwartz has also noted, social holons have no organising consciousness or "monadic centre" and can only be said to have an "indirect" or "kind of" centre of gravity, with leaders exerting varying levels of influence on discourse.[421] Part of the criticism of and challenge for integral theory is its lack of understanding about whether the higher individual altitudes can become widely established and expressed in social holons. Not only is there an overt focus on individual development (Upper-Left) in integral theory, but an apparent growing use of – or "grafting," as Schwartz calls it - of Upper-Left/Right (individual) methods to analyse complex social holons (Lower-Left/Right). Schwartz provides a more nuanced integral approach to the description and analysis of social holons and the chiasmic connection between the social and the individual.[422] As noted above, the recent academic collision of integral theory and critical realism and exploration of other useful methodologies and philosophies (such as those postmodern modalities invoked by Schwartz) is helping to address this potential methodological problem and possible weakness of integral theory in the social realm.[423] Embedding new values in parties, policies, politics and polities has always been difficult, and new approaches will be required to translate the integral individual's passion into a social reality. Some of the issues around the interpretation - and application of - the terrain of cultures are explored further in chapter five, which explores the Polity aspect of the IPT, or the "we".

3.2 The Integral Policy Triptych: application to Antarctic policy and politics

In earlier chapters I sketched and started to develop an integrally-informed framework for Antarctic policy. Not only do I believe this to be a fertile field for applying integral theory and integral ecology, but it is an

[421] Michael Schwartz, On Social Holons, Ideologies of Integral, and the Kosmopolitan Call of Politics, *Journal of Integral theory and Practice,* 2013, 8(3&4), pp. 126-145.
[422] *Ibid*.
[423] Darcy Riddell, 'Bring on the Revolution: Integral theory and the Challenges of Social Transformation and Sustainability', *Journal of Integral theory and Practice,* 8(3&4), pp. 126-145.

area where my work and life experience can provide at least some insight into the policy, and politics, of the protection, use and management of Antarctica; specifically, how policy approaches can be informed by my experience (as a scientifically-trained political adviser) of a pest eradication project carried out on subantarctic Macquarie Island.[424] The Antarctic region is unique in a policy context. No other continent or sub-continental jurisdiction has equivalent multilateral protections or commitments to peaceful scientific cooperation, not only the "innovative international legal mechanisms, but also the strong spirit of cooperation and consensus which prevails amongst the Treaty parties."[425] There are not many parts of the world that have such a "distinctive regional regime," particularly with regard to peaceful exploration and (at least aspirational) stewardship. [426] Few other places can help us understand and adapt to the increasing impact of climatic change, whether anthropogenic or otherwise, that will be our common companion while humans inhabit the Earth.[427] In addition, the future governance of Antarctica - not just environmental governance - will impact heavily upon the sovereign interests of many of the states directly involved in the Antarctic Treaty System and those outside it that nevertheless have a strong interest the future of Antarctica. The Treaty's Madrid Protocol has even provided a reference point and inspiration for how we might manage the economic and environmental impacts of space debris.[428]

The many layers, quadrants and perspectives on and of Antarctica provide an abundance of richness for an integral analysis: Antarctic politics, policies, treaties, laws and related governance, including the observed behaviour of individual treaty countries;[429] economic relationships and impacts (both current and historical);[430] impacts of human activities;[431] state or national interests;[432] cultural and artistic connections to Antarctic exploration and its expression through painting, photography, film, writing, and other art forms;[433] research on Antarctic geophysical and ecological systems;[434] the personal experiences of authors

[424] Parks and Wildlife Service Tasmania, *Evaluation Report: Macquarie Island Pest Eradication Project*, August 2014, Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania; J Whinam; N Fitzgerald, M Visoiu and G Copson, 'Thirty Years of Vegetation Dynamics in Response to a Fluctuating Rabbit Population on Sub-Antarctic Macquarie Island', *Ecological Management and Restoration*, 2014, 15(1), pp. 41-51; Justine Shaw, Aleks Terauds and Dana Bergstrom, 'Rapid Commencement of Ecosystem Recovery Following Aerial Baiting on Sub-Antarctic Macquarie Island', *Ecological Management & Restoration*; 2011,12(3), pp. 241-244.

[425]Donald R Rothwell, Karen N Scott and Alan D Hemmings, 'The Search for 'Antarctic Security,' in Hemmings, Alan D; Rothwell, Donald R; Scott, Karen N (eds.), *Antarctic Security in the Twenty-First Century : Legal and Policy Perspectives*, Routledge, Oxon, 2012, p.10; Oran R Young, 2016, 'Governing the Antipodes: International Cooperation in Antarctica and the Arctic', *Polar Record* 52 (263), pp. 230–238.

[426] Rothwell, Scott and Hemmings, 'The Search for 'Antarctic Security,' p. 2.

[427] Zimmerman, 'Rethinking the Climate Change Debate from an Integral Perspective.'

[428] Mary Button, 'Cleaning Up Space: The Madrid Protocol to the Antarctic Treaty as a Model for Regulating Orbital Debris', *William & Mary Environmental Law and Policy Review*, 2013, 37, p. 539.

[429] J Jabour, AD Hemmings, and L Kriwoken, *Looking South: Australia's Antarctic Agenda.* Federation Press, Leichhardt, 2007.
Melissa Weber, 'Comparing the Robustness of Arctic and Antarctic Governance through the Continental Shelf Submission Process', *Polar Record*, 2014, 50 (252), pp. 43–59.

[430] Jennifer Jacquet, Eli Blood-Patterson, Cassandra Brooks and David Ainley, '"Rational Use" in Antarctic waters', *Marine Policy*, 2016 (63), pp. 28-34.

[431] T Tin, ZL Fleming, KA Hughes, DG Ainley, P Convey, CA Moreno, S Pfeiffer, JJ Scott and I Snape, 'Impacts of Local Human Activities on the Antarctic Environment', *Antarctic Science*, 2009, 21 (1). pp. 3-33.

[432] Marcus Haward and Nicholas Cooper, 'Australian Interests, Bifocalism, Bipartisanship, and the Antarctic Treaty System', *Polar Record*, 2014, 50 (252): 60–71.

[433] Lynne Andrews, *Antarctic Eye: the Visual Journey,* Studio One, Mornington, Tasmania, Australia, 2007.

and psychology of expeditioners;[435]mission statements of environmental non-government organisations, strategic plans of government bodies[436], parliamentary inquiry and debate;[437] and the role of animals in research and exploration.[438] Integral ecology allows an ordering of and focus upon the modes of investigation in each terrain or quadrant of Antarctic endeavour. Why Antarctic policy specifically? As noted above, the answer goes beyond mere environmental management of the traditional kind and beyond complex ecological (lower-right, Terrains of Systems) approaches to environmental management. If all that we had to do was protect Antarctic ecosystems then we would still have a difficult policy problem on our hands. But the challenge is greater than an (objective or interobjective) ecological one. As a recent author notes, current Australian Antarctic policy is mostly framed within a scientific and environmental management framework and this could be argued to be to the detriment of wider strategic considerations, notably the interests of Australia in Antarctica and the regional interests of the country.[439] Those using an integral approach should baulk at allowing activities that could adversely affect the environment of the Antarctic region. But regardless of what our own environmental perspectives may be, we cannot deny that there is a wider strategic connection between Antarctica and a range of national sovereignty, resource and security policies. As Fogarty notes, "as with the Arctic, a growing understanding of Antarctica's potential to provide food, economic and energy security is influencing the development of a number of states' Antarctic policies."[440] To this I would add broader aspects of security that are much wider than just military security;[441] the security of the environment and the security of humans in that environment. [442]The use of

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E Leane, CJ Philpott and S McIntryre, 'Songs of the South: A Song Cycle for Mezzo Soprano and Piano Based on Lyrics from the Heroic Age of Antarctic Exploration.' *International Journal of Contemporary Composition*, 2014, 9, pp. 1-43; Carolyn Philpott, 'Sonic Explorations of the Southernmost Continent: Four Composers' Responses to Antarctica and Climate Change in the Twenty-First Century', *Organised Sound*, 2016, 21 (1), pp. 83-93.

[434] Frédéric Vivier, Young-Hyang Park, Hela Sekma, and Julien Le Sommer, 'Variability of the Antarctic Circumpolar Current transport through the Fawn Trough, Kerguelen Plateau', *Southern Ocean Dynamics and Biogeochemistry in a Changing Climate*, *Deep-Sea Research Part II*, 2015, 114, pp. 12-26.

[435] Kimberley Norris, Douglas Paton and Jeff Ayton, 'Future Directions in Antarctic Psychology Research', *Antarctic Science* , 2010, 22(4), pp. 335-342.

[436] A.J Press, *20 Year Australian Antarctic Strategic Plan*, Antarctic Division, Kingston, Tasmania, 2014.

[437] The Australian Senate, Foreign Affairs, Defence and Trade References Committee, *Australia's Future Activities and Responsibilities in the Southern Ocean and Antarctic Waters*, Commonwealth of Australia, 2014; Australian Government, Australian Government Response to the Senate, Foreign Affairs, Defence and Trade References Committee report *Australia's Future Activities and Responsibilities in the Southern Ocean and Antarctic waters,* Tabled 4 February 2016.

[438] ABC Premium News, Sep 03, 2015, 'Stamp Honour for Dogs who Saved Macquarie Island', http://www.abc.net.au/news/2015-09-03/stamp-honour-for-dogs-who-clean-up-macquarie-island/6746672, retrieved 23 March 2015.
Beau Riffenburgh, 2012, 'The Dogs of the Australasian Antarctic Expedition 1911–1914', *Polar Record* 50 (253): 128–137.

[439] Ellie Fogarty, *Antarctica: Assessing and Protecting Australia's National Interest*, Lowry Institute Occasional Paper: Policy Brief, 2011.; Klaus Dodds, 'Governing Antarctica: Contemporary Challenges and the Enduring Legacy of the 1959 Antarctic Treaty', *Global Policy*, January 2010, Volume 1 . Issue 1, pp. 108 – 115.

[440] Fogarty, *Antarctica,* p. 4.
https://www.rt.com/news/331837-china-antarctic-arctic-russia, retrieved 23 July 2016.
Iselin, Stensdal, 'Coming of age? Asian Arctic research, 2004–2013', *Polar Record,* 2016, 52(2), pp 134-143.

[441] A recent Australian Defence White Paper notes the following: "There is, however, increasing international interest in Antarctica, including in Australia's Antarctic Territory. Australia has forged operational and scientific cooperation relationships with several nations and will continue to monitor the strategic implications of international developments in the Antarctic region. To date, the Antarctic Treaty System has been well respected, but in coming decades it may come under pressure as resources become more scarce elsewhere." See Australian Government, *Defence White Paper 2013*, Department of Defence, Canberra, 2013.

[442] Hemmings, Rothwell and Scott, *Antarctic Security in the Twenty-First Century*, p. xix, 3.
Daniel Bray, 'The Geopolitics of Antarctic Governance: Sovereignty and Strategic Denial in Australia's Antarctic Policy', *Australian Journal of International Affairs*, 2016, 70 (3), pp. 256-274.

integral theory and integral ecology can help policy-makers and politicians understand and adapt to the increasing complexity of Antarctic policy and politics. This is because the multitude of disciplines and practices used across the quadrants allows us to understand from different perspectives the complex economic, social and environmental factors at play. The usefulness of multidisciplinary approaches is well recognised and it is my view that Antarctic policy practitioners will consider the Integral framework a useful one, even if just to understand the individual and collective analytical and explanatory power of a multitude of disciplines and approaches.

As it enables us to consider a multitude of developmental levels and viewpoints, integral ecology also provides a framework to more fully consider the values (environmental or otherwise) that underpin the different states' approaches to their Antarctic endeavours. And the focus on Antarctica allows a focus on the global multilateral treaties and other administrative, legal and policy mechanisms under which it is managed, and that will likely shape future management of the continent and its surrounding oceans. This provides a useful link with the work of Eckersley. Her monograph on the Green State and more recent work on globalisation and its effect on the environment, are largely premised on the state maintaining its cohesion and sovereignty, while being able to affect environmental and ecological considerations through such multilateral mechanisms.[443] This connection to the "good" state is more fully explored in Chapter Five. This chapter presents my concept of the Integral Policy Triptych, which is designed give order to a multitude of policy and political perspectives, and to show how a deep integral policy analysis could be framed at a meta-level, while accepting the paradox that politics often does not leave room for deep consideration of anything (let alone a meta-level).

The Integral Policy Triptych is based on a Ken Wilber integral "shorthand" that collapses the four perspectives in integral theory into three: the "I," the "We" and the "Its." To each of these in the triptych I give an ecological version: Person, Polity and Planet respectively. Before elaborating on these terms, it is worth considering the definition of "triptych". In antiquity, this referred to a set of three writing tablets hinged or tied together (like the waxed ones used in ancient Greece and Rome). It is also a painting or carving on three panels joined together, forming a coherent scene or scenes following a particular theme, often religious in nature and found in Christian churches. A triptych can also be an artistic work (for example, literary, dance, and musical) that consists of three parts, intended to be presented and enjoyed or appreciated together.[444] The artistic definition is a useful one. Each component of a triptych can be appreciated on its own, but the full aesthetic comes with viewing, hearing, or reading all three parts. This is

[443] Robyn Eckersley, *The Green State: Rethinking Democracy and Sovereignty*, The MIT Press, London, 2004; Peter Christoff and Robyn Eckersley, *Globalization and the Environment*, Rowman & Littlefield, New York, 2013. See also James Meadowcroft, who sees the ecological state as being an international response to transboundary environmental issues, which has resulted in global environmental agreements, treaties, and the associated normative discourses on the responsibilities of states; James Meadowcroft, 'From welfare state to ecostate', in J. Barry and R. Eckersley, eds, *The state and the global ecological crisis*, MIT Press, Cambridge, MA, 2005.

[444] Lesley Brown, (ed), *The New Shorter Oxford English Dictionary*, Clarendon Press, Oxford, 1993.

true, for example, of the disciplines associated with the quadrants. The insight gained into one quadrant can be appreciated alone. The insight gained from considering all four as a whole, bound together by the common theme or overarching framework of integral theory, is one reason the concept of the Triptych is useful.

The combined objective and interobjective quadrants, the Terrains of Behaviour and Systems, or what Wilber collapses into his "Its", I label the "Planet." The Planet focuses on objective and interobjective policy approaches, ones using the hard sciences, economic and ecological modelling, legislation and regulation, and the various disciplines used by numerous policy practitioners around the world.[445] The intersubjective quadrant, the "We", or the Terrain of Cultures, I label the "Polity". Polity focuses on the communications within and between sub-jurisdictions and individuals in the Polity and the values shared and agreed upon through this communication. The Polity component uses a broad political philosophy and politics based on an integral adaptation of Robin Eckersley's "Green State" and more recent works and an understanding of the "unfinished" nature of democracy, such as that presented by John Keane.[446] The integral interpretation of Eckersley and Keane is designed to provide a broader philosophical base for the ITP that, if in place, would make the implementation of an integral Antarctic policy much more likely. This is the subject of Chapter Five.

The "I," the subjective quadrant or Terrain of Experiences, I label the "Person." Person focuses on the adoption of a personal integral praxis. The example of the Person provided in Chapter Six is the so-called "integral policy adviser," who strives to embody and disseminate integral values to individuals and organisations. It should be noted that the description of this integral policy adviser is kept short. Given that there is already a wealth of information on integral approaches to personal development, I felt that a personal praxis would be more usefully serviced by more focus on intersubjective and objective components. However, the I, We and Its, or Person, Polity and Planet can be considered in any particular order, with any particular weight given to components that an author has mapped out as being useful. It may suit one person's analysis to do so. It is not meant to give one component more prominence, as all aspects will eventually be considered together.

Here the other definition of triptych, as three wax tablets bound together, is pertinent. Imagine the blank trifold surface in front of you. Pick up your ancient stylus and on each separate tablet write the headings Person, Polity, and Planet. Fill each tablet with a list of the disciplines, approaches, methods you will use to analyse that part: the objective and subjective, the interobjective and intersubjective, developmental aspects of each quadrant, Terrain, or part of the Triptych. Remind yourself that this is a cognitive map, a list

[445] Michael Howlett and M Ramesh, *Studying Public Policy : Policy Cycles and Policy Subsystems*, Oxford University Press, Don Mills, Ontario, 2003.
Brian Head and Kate Crowley, *Policy Analysis in Australia*, Policy Press, Bristol, 2015.
[446] John Keane, *The Life and Death of Democracy,* Simon & Schuster UK, London, 2009.

written on a wax tablet. Such a tablet can be heated and returned to being a *tabula rasa,* ready to be filled in again with lists of different disciplines to analyse the same problem, or a different problem. There are as many maps as there are individuals, but the maps melt back into the wax. The wax remains, the triptych remains, and the framework of the Integral Triptych remains. It is a simple image of the Triptych that I would like policy practitioners to use to not only reinforce the Person, Polity, Planet mnemonic, but to remind them to not mistake the map for the territory.

The Triptych is not intended to be used only for environmental policy. It could be applicable to any policy or political practice. The adopted labels of Person, Polity and Planet merely reflect the spirit of Esbjörn-Hargens and Zimmerman's integral ecology, and the application to environmental matters more broadly and Antarctic policy and politics specifically. Integral theory and integral ecology provide a framework to rigorously examine the objective and interobjective aspects of policy, or the exterior terrains, while ensuring that the map is "populated" with a range of interior terrains that take the form of personal and cultural values, memes and meanings. By populating the Triptych with the subjective and intersubjective, and with various developmental holarchies in these quadrants, we could tailor polices and politics to a wide range of values and cultural settings. For example, drawing on the categories of ecological consciousness or the ecoselves, as outlined in Chapter Two, we could pitch a policy using language that connects to the ecological values of a wide range of people.[447] An example of this is examined in Chapter Five, which addresses the collective subjective or interobjective aspect of the Triptych, the Polity. Complementing an (inter)objective policy with subjective and intersubjective values means that we could adapt it to a range of political philosophies and methodologies. If integral ecology and the Triptych are only used by Green policy makers or Green politicians, they could be of some use. But they will be much more useful to policy-makers of all stripes if, like the eco-holist and eco-integralist, they work towards being able to appreciate conflicting truths and towards being able to appreciate a multitude of perspectives.

In that way, integral ecology is particularly well-placed. As briefly canvassed in Chapter Three, it can bridge the gap between some of the core green philosophies and integral theory. It can also provide qualified support for conservative approaches to green philosophy, such as those examined by Roger Scruton.[448] It is therefore of potential use to conservatives. It could potentially make sense of any non-Green party's on-again, off-again affairs with environmental (and even, occasionally, "Green") policy and politics, such as those observed in jurisdictions like the state of Tasmania, Australia, where minority governments are not uncommon[449] and even occasionally at the federal level in Australia.[450] There are also applications for those

[447] Barrett Brown, 'Integral Communication for Sustainability', *Kosmos,* 2005, Spring/Summer, p.17.
[448] Scruton, *Green Philosophy*.
[449] Kate Crowley, (ed), *Minority Government: The Liberal-Green Experience in Tasmania*, School of Government, University of Tasmania and the Australasian Study of Parliament Group, 2012.
Kate Crowley, 'The Place Of Nature? Electoral Politics and the Tasmanian Greens'**,** *People and Place,* 2008, *Vol. 16, No. 2,* pp. 52 – 61.

attempting to establish coalitions of labour and environmental groups.[451] This is not to say that integral policy-making or politics should seek to smooth over all differences in a wave of bipartisanship or tripartisanship. While at its core it is an ostensibly progressive theory (due to its strong developmental aspect), it also should include “healthy” conservative perspectives. Integral theory and integral ecology, or at least my interpretation and use of them at this relatively early juncture in the development of integrative studies, will not necessarily bridge any political divide. But they are a useful way to further define and improve the moving feast that is democracy and even give it a rigour it might not otherwise have during future conflict with other less representative and deliberative ways of governing. As a practical policy example, take any stripe of government looking to extract what *they see* as maximum value out of a social services program. A government could use Integral Methodological Pluralism to improve the translation of research outcomes into practice.[452]

While Planet, Polity, and Person could be used for matters beyond just the environment, alternative names could be used in other policy areas, for example in medicine or law enforcement, to represent the perspectives in the Triptych. This would help to provide an appropriate professional or disciplinary resonance for particular policy or political analyses. My designations are somewhat straight-jacketed by their source material. But, the core concept is the Triptych, and each part represents and provides a mnemonic for the perspectives or quadrants of integral theory. Each component has its own integral practices to develop responses for personal, polity or planet-sized policy problems, and to mesh those solutions into a cohesive whole. It also partly streamlines Wilber’s four quadrants into three more (relatively) bite-sized chunks, as he did with his own "shorthand". The Triptych is used to bring focus to all quadrants, to remind one of their importance, but it is clear that each part of the Triptych has its own areas of specialisation and in most cases its own specialists. A practitioner using the Triptych does not need to be a specialist in all areas, but will recognise gaps in knowledge and compensate for these through the appropriate allocation of resources (e.g. consultants, academic or government agency "in-kind" contributions, delegating political staff or departmental liaison officers). Often, the realpolitik of a situation means that time will be of the essence, for example where a political media adviser is responding to a media inquiry. Politicians will want a response that at least broadly understands the "we," the Polity, some lines that resonate with what they think constituents are thinking and then something that also resonates with the "I", the particular wave or centre of gravity stage with which you are trying to communicate.[453] If you have limited time, you cannot do an integral analysis on the back of an envelope. But if the groundwork

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Kate Crowley, ‘Against Green Minority Government? Themes and Traditions in Tasmanian Politics’, *Tasmanian Historical Studies*, 2009, Vol. 14, p 137 153.

[450] Joy McCann, ‘Balancing Act; the Australian Greens 2008-2011’, *Research Paper No. 7, 2011-12,* Department of Parliamentary Services, Canberra, 2012.

[451] Erik Kojola, Greening Labor Unions: Environmental Concerns of Union members, unpublished PhD thesis, American University, 2013.

[452] Heather Larkin, Brooke A Beckos, and Elisa M Martin, 'Applied Integral Methodological Pluralism: Designing Comprehensive Social Services Program Evaluation and Research', *Journal of Integral theory and* Practice, December 2014, 9(2), pp. 76 - 91

[453] Brown, ‘Integral Communication for Sustainability.'

has been done, then appropriate templates for addressing Person, Polity and Planet can be prepared, and relevant “ready-to-go” lines created that weave personal, political and planetary meanings into a political strategies and communications. Having worked in a political office, I certainly recognise the challenges of adopting such practices and the level of coordination that would be required. However, if an integral framework were used, much of the strategy and tactics would, as in any other political situation ideally be already worked out ahead of time.

The Polity described in this thesis consists of actual states or sub-jurisdictions and sub-states, and their interactions in the intersubjective or cultural realm. For example, an integral interpretation of Eckersley's Green State would recognise the need for the Polity or the "good" state (reflected in its collectively held values) to be underpinned by "good" environmental, economic, political and legal objective and interobjective systems (upper and lower left) and "good" individuals. The development of a broader integral political philosophy and politics would not only need to be backed up by rigorous objective and interobjective - and intersubjective - methodologies and analysis, but also an intimate understanding of the "Person," the subjective "I." The "Person" component of the Triptych could be an examination of what the "I" of a so-called integral political (or policy) adviser might look like. Complementing the Person with the Polity could, for example, involve the promulgation of a network of integral practitioners and the development of a code of conduct for such practitioners. The cultural and communicative interactions between the practitioners would be defined through disciplines and practices giving an understanding of the Polity. The actual code of conduct, as written up, would be part of the Planet, the interobjective aspect of this example of a Triptych.

Using the Triptych for Antarctic policy and politics involves using a full suite of disciplines or epistemological policy tools to create an integral response. Then we can feel comfortable putting (inter)objective insight into climate change (perhaps gleaned from penguin diets) next to hermeneutical analysis of texts on Antarctic exploration. The findings of a complex ecological investigation can tell us what we might need in an interobjective sense to manage Antarctica. But interpreting the heroic endeavours of Australian, Russian, European and American Antarctic (and Arctic) explorers could also help us frame policies that take into account a wide range of intersubjective meanings and values as embodied in or applied to Antarctica, and this would be complemented by an integral approach to interpreting these values.[454] A respect for the Terrain of Cultures may ease the adoption of Antarctic policy by other states or jurisdictions. What the Triptych attempts to do is place itself as firmly as possible within the realpolitik of a situation, by recognising that under certain policy or political situations some quadrants will have more weight. It makes sense to focus on those quadrants that will achieve one's policy or political goal, although not - and ideally never - to the exclusion of all others. Some may call this expedience, and partly, it is, but I also like to call it

[454] Marina Gaskova, ‘Values Consciousness of the Russian Populace after the Collapse of the Soviet Union’, *Journal of Integral theory and Practice,* June 2014, 9(1), pp. 99 – 112.

retrofitting integral with realpolitik, or perhaps the converse. It also means you are using the most appropriate disciplines and methodologies to the task at hand. Figure 4.1 shows a basic "mapping" of a Person, Polity, and Planet Triptych onto Antarctic policy. The Triptych employs a basic AQAL (All Quadrants, All Levels all lines) analysis, but also uses Wilber's Integral Methodological Pluralism (IMP). This recognises that each perspective or quadrant can be investigated by other perspectives, and, hence, seen from the outside as well as the inside. Thus, from the four quadrants we have eight "native" perspectives. I use the integral ecology term for these perspectives: the eight ecological modes or ecomodes. The use of the ecomodes is underpinned by three key precepts of IMP. These are: *nonexclusion*, the willingness to accept the claims that various schools of thought have made that have been validated by the Community of the Adequate working in those disciplines; *enfoldment*, or the acceptance that some paradigms or disciplines transcend and include more aspects of reality and are therefore more comprehensive; and *enactment*, the understanding that the perspectives explored by these disciplines are dependent upon the influence of ontology and epistemology, and upon the "who" that is the researcher.[455] The ecomodes are used to analyse or inform the quadrant(s) or terrain(s) that make up each part of the Triptych. The Planet component of the Triptych consists of the Upper and Lower Right quadrants. The outside ("Zone 8") of the Lower Right interobjective quadrant, or Terrain of Systems, can be explored through the ecomodes offered through various systems theories The inside of this terrain ("Zone 7"), can be explored through the ecomodes of social autopoiesis theory. The inside of the objective upper-right quadrant, or Terrain of Behaviours ("Zone 5"), can be explored through third person modes of inquiry such as autopoiesis theory. The outside of that terrain ("Zone 6") can be described through empirical methods, for example chemistry, physics, and mathematics.

The Polity consists of the intersubjective Lower left, the Terrain of Cultures. The inside of the terrain ("Zone 3") can be inspected through (eco)hermeneutical analysis of the customs, mores and ethics in relation to Antarctica that are held by those states with an interest (whether parties to the Antarctic Treaty or not) and their collective cultural attitudes to the environment generally. The outside of this terrain ("Zone 4") can be explored through an ethnomethodological analysis of how other cultures and communities have shared the experience of the continent and its oceans and how this structures and orders their relationship to Antarctica. This is often through the practices of reading, writing and creating stories about Antarctica and the shared values that drive the scientific practices and political processes employed to ensure its protection. The Person consists of the subjective upper-left quadrant or Terrain of Experiences, with the inside of terrain ("Zone 1") being explored through ecophenomenology or the meditative or contemplative experiences of individuals involved with Antarctica in some way, whether civil or public servants, scientists, artists, policy officers, or members of parliaments. The outside of this terrain ("Zone 2") is explored using

[455] Esbjörn-Hargens and Zimmerman, *Integral Ecology,* pp. 42-43.

the ecoselves as interpretative themes, for example, how the Zone 1 experience is filtered or structured by a person's orienting ecoselves.

The Integral Policy Tryptic is, then, my proposed method and potential integral ecology model. It is not proposed that this model claim metatheory status. Nonetheless, it is a model and methodology based on the rigorous meta-level construction of EZI and the underpinning Wilberian integral theory and IMP. In the following chapters I draw on many sources of data - subjective, relational and objective - to populate the IPT and then interpret that data through my proposed integrative framework. In turn, I hope to demonstrate that the IPT can articulate a meta-level model of an integrally-informed democracy. However, before I examine in more detail each component of the IPT, it is important to again heed Edwards' call to be open about the type of metatheorising being done. Edwards presents two types. The first is philosophical, which addresses ontological, epistemological, methodological and ethical aspects of its constituent theories, and which develops and tests metatheory "by systems of logic, first principles and deliberately enunciated *a priori* (before the fact) commitments."[456] The second is scientific metatheorising, which uses theories as "data points", and which builds and tests metatheory "by specifying domains, collecting, reviewing and analysing 'data', developing explanations and truth claims and testing those claims on the basis of a posteriori (after the fact) methods." [457] It is fair to say that much of Wilber's work falls into the latter.[458] EZI is also strongly scientific in its metatheorising. Both Wilberian integral theory (IMP) and EZI use middle range theory to address those principles that are elucidated through philosophical metatheorising; being the "what" (ontological), "who" (epistemological) and "how" (methodological). Wilber's IMP and its equivalent approach in EZI are scientific forms of metatheorising, as they require the use of numerous middle-range methodologies or ecomodes.[459] One type of theorising cannot occur in the absence of the other, although, in this case of this thesis, much of the philosophical metatheoretical heavy lifting has been done by Wilber, Esbjörn-Hargens and Zimmerman.

Being primarily based on IMP and the injunctions of EZI, this thesis is more scientific in its metatheoretical goals. This is because the IPT is a framework to facilitate the review and description of the theories, methodologies and disciplines that make up each domain (or aspect) of the integral policy approach (i.e. the domains (or realms) of person, polity and planet). Hence "the elements of these theories can be analysed methodically to create new overarching models, new directions for research, new understandings of the relationships between theories and new opportunities for revisioning how we see the world."[460] In this thesis I am primarily concerned with the building of a conceptual system (the IPT) to form a basis for

[456] Edwards, 'Misunderstanding Metatheorizing', p. 721-722.
[457] Ibid., p. 722.
[458] Edwards, 'Towards an Integral Meta-studies', p. 180-181.
[459] In short, middle-range theory is built and tested from empirical data, whereas metatheory is built and tested from conceptual and theoretical data.; see Edwards, 'Misunderstanding Metatheorizing', p. 733.
[460] Edwards, 'Misunderstanding Metatheorizing', p.722; George Ritzer, Shanyang Zhao, Jim Murphy, 'Metatheorizing in Sociology: The Basic Parameters and the Potential Contributions of Postmodernism', in *Handbook of Sociological Theory*, J.H Turner, (ed.), Springer: New York; 2002, pp. 113–134.

the review and analysis of middle-range theory relevant to policy, politics and democracy. Some testing of my conceptual model also occurs via this review and analysis, its focus being on whether integral ecologies (EZI in particular) can inform - or even improve the electoral success of - progressive/green policies and politics; and whether integral ecologies can positively influence the policy and politics of Antarctica. The aim is to honour the diverse range of theories and approaches used to flesh out this particular example of the IPT, and, as Edwards notes, to "find structure in diversity rather than subsuming diversity within a single conceptual structure."[461]

I believe an IPT model could be used to inform philosophical metatheorising. But its focus is on using existing integral philosophies - Wilberian integralism and EZI's metatheory in the ecological domain - as a framework to carry out scientific metatheorising that helps to develop a novel integral political model, and, where possible, creating new research trajectories and developing new understandings of the connections and differences between at least some of the theories that constitute its data. These theories include: a variety of ecological sciences (particularly those pertaining to the study and understanding of Antarctica); behavioural policymaking; Antarctic policy, law, and politics; social autopoiesis; "stages" and levels of ecological politics and democracy more broadly; developmental philosophies, Eckersley's ecological adaptation of critical theory - critical political ecology; John Keane's "monitory democracy"; and self-analysis using the ecoselves. In some cases, the studies I use as data - and, hence, their underpinning theories - are referred to as merely examples of what an IPT would take into account. In other cases, there is more exploration of the underpinning philosophy and theory, particularly to show where an integral approach can be developed from one that already have has integral elements (Eckersley/Keane).

The IPT does not aim to go back to philosophical basics, at least with regard to the polity. Rather, it uses the ecological derivate of an already existing and highly-regarded philosophical domain, then analyses how this ecological cousin can be used through the practical aspects of my metatheoretical model. By assuming that much of the philosophical lifting has been done for me, I have not overly focused on questioning or analysing the key underpinning philosophies. What I have done is flagged Wilber's high opinion of - and philosophical debt to - some principles of modern critical theory, notably those developed by Habermas. Eckersley's critical political ecology also uses a critical theory framework, but extends it to ecological concerns. Rather than make any deep analysis of its Habermasian base or the critical theory used by Wilber, I instead take it as a solid and fairly rigorous philosophical given. What I am interested in is that, due to its critical theory base, Eckersley's critical political ecology and her green state are already somewhat integral in nature. This is an important point and it is the reason that there is particular focus on the monograph where her robust definition of a semi-integral state is so eloquently described and defended. This is explored further in chapter five.

[461] Edwards,' Misunderstanding Metatheorizing', p. 739.

In chapter one I provided a brief sketch of the august lineage of integrative thinkers like Habermas, and an overview of the integral ecologies that have arisen from similar integrative philosophy in the ecological domain, such as the ecologies of Boff, Berry, Swimme, the Hedlund de-Witts, and Pope Francis. This makes it clear that Wilber's integral theory, EZI's *what, who,* and *how*, Wilber's IMP and EZI's ecomodes and other injunctions, are robust forms of philosophical and scientific metatheorising. As the IPT model is based on these methodologies, it brings its own level of rigour, at the very least with regard to the examination and application of the theoretical and conceptual data that apply to each part of the IPT.

PERSON TERRAIN OF EXPERIENCES	PLANET TERRAIN OF BEHAVIOURS
Inside (Zone 1) • Description of my own experience on a Macquarie Island expedition • Understanding of integral principles as applied to the self Outside (Zone 2) • Interpretation of experience through the framework of the ecoselves • Consideration of the ecoselves of Antarctic explorers	Inside(Zone 5) • An individual holon's self-organisation or autopoiesis • The effect of winter on the hormone levels of a penguin Outside (Zone 6) • The observed behaviour or structure of an individual holon • The observed behaviour of a penguin during the winter • The embodying of integral values by the Integral Political Adviser
POLITY TERRAIN OF CULTURES	PLANET TERRAIN OF SYSTEMS
Inside (Zone 3) • Cultural values relating to Antarctica • Eckersley's Critical Political Ecology and Keane's Monitory Democracy Outside (Zone 4) • Ethnomethodological analysis of Antarctic "storytelling" • Integral values as expressed in a monitory institution's raison d'être.	Inside (Zone 7) • The collective holon's self-organisation or social autopoiesis • How Antarctica is defined within the structure of legal, social and political systems. Outside (Zone 8) • The complex and collective legal, political, social and environmental systems affecting Antarctic policy and politics • A Statement of Integral Values from a Integral Media Monitoring NGO

Figure 3.1 An Antarctic Triptych: Planet, Polity, Person. The Planet is the Terrain of Behaviours and Terrain of Systems, exemplified by the objective core sciences such as physics and chemistry, but also through complex systems approaches that help explain the inside and outside of political and economic and environmental systems. The Polity is the shared cultural understanding and agreement on the values underpinning policy, politics and democracy. The Person is the realm of experience of the environment and nature and how we individually relate to them, and, thus, how we can communicate the "needs" of the environment in relation to that individual connection.

4. The Planet

4.1 The Planet: The objective terrains of Antarctica

The Planet consists of EZI's Terrains of Behaviours and Systems, which are Wilber's "Its," the objective and interobjective perspectives. In policy terms, they are the objective and interobjective policy analyses or policy tools we are familiar with: policy gap analysis, environmental scanning, cost-benefit studies or other economic modelling, ecological modelling, ecological or population viability analysis, legislation and regulation, and international treaties. They are also the objective things we observe, for example, the behaviour of individuals in a system, under certain social or legal conditions. These are the objective and interobjective disciplines that are used broadly by policy practitioners across the field.[462] This is also the realm in which we observe, record, and analyse the impact of public and private political behaviour, of individual political or policy agents.

As much as I am sometimes tempted to label political parties as singular beasts, their exterior behaviour is of course a result of complex systemic processes operating at the interobjective level and co-arising along with deeply-held (and often deeply-conflicted) interior values operating at the individual and collective levels. An understanding and grasp of this complexity, engendered through an understanding of the behaviour of individuals and its impact on policy, can help us to understand the total policy and political picture. Although the focus is on the Terrains of Behaviour and Systems, and the main policy tools we bring to the table are those looking at the *exterior* of the policy situation, we always have the other Terrains in mind. But the focus on the (inter)objective is important, as it is realistic about how policy is now broadly developed, implemented and analysed. In this example of the Planet, some of the modes have been given more prominence, particularly in terms of the length of descriptions. This is not accidental. A policy practitioner is likely to use the objective policy tools with which they are most familiar, but also modes that provide a strong subjective and intersubjective connection to the policy problems at hand, so it is likely that in any investigation more detailed analysis will be provided for some ecological modes.

Figure 3.1 shows how the analysis of Planet requires at least four ecomodes (zones 5 to zone 8) to inquire into the outside and inside of the Behaviour and Systems Terrains respectively. First we turn to a familiar policy tool which looks at the outside of the Terrain of Behaviours (Zone 6); that is documenting and analysing the behaviour of individuals as seen from the outside of this Terrain. This could be the behaviour you wish to change, or perhaps reinforce, with a new policy, the behaviour of a Member of Parliament, the behaviour of a constituent, or any other political or policy actor in relation to a particular policy (including the behaviour of groups or organisations). Perhaps the policy issue is whether a type of rodent bait should be used on Macquarie Island to eliminate

[462] Howlett and Ramesh, *Studying Public Policy;* Head and Crowley, *Policy Analysis in Australia.*

rabbits and rodents, when there is a chance that several threatened bird species may also be impacted (though not eliminated, and the removal of rabbits and rodents is deemed to be required for those bird species to survive). An analysis would not only have to include a teasing apart of the behaviour of the representative and their constituent, but it also might include an investigation around the behaviour of wild rabbits during their breeding cycle and how that might interact with the provision of bait, or the behaviour of scavenging gulls who eat the poisoned rabbits. Other examples in this ecomode might include dieback of particular plant species on Macquarie Island due to climate change and other factors.

4.2 The Terrain of Behaviours: behavioural policymaking

The preceding examples are of the external behaviour or structure of holons and a number of policy methodologies are available to document and to analyse these aspects and to take account of the impact of human behaviour. However, the exterior behaviour as observed is of limited use by itself and must be complemented with insight into the subjective experience of the person. This requires an understanding derived from psychology. Although the importance of behaviour and psychology to policy making was recognised in 1918 by the economist John Maurice Clark,[463] it has only been relatively recently that there has been an increased focus on the use of the behavioural sciences in policy analysis. Behavioural policymaking was popularised in part by Sunstein and Thaler's book, *Nudge: Improving Decisions about Health, Wealth, and Happiness*[464] and the last decade has seen an increase in academic exploration of the topic.[465] It is based on the relatively simple observation - albeit one that many approaches to the study around decision-making have documented for decades - that people do not usually make rational choices. This has permeated some policy making communities to the extent that it has become the subject of an Executive Order issued by the President of the United States, Barak Obama, in 2015.[466]

Entitled *Using Behavioral Science Insights To Better Serve the American People,* this Order recognises that purely economic or fiscal data is an insufficient grounding for policy; it must be complemented by an evidence-based approach to policy making, in this case one based on actually observing the behaviour of people (Terrain of Behaviours) and using the psychological and behavioural sciences (Terrain of Experiences) to not only understand the behaviour, but to provide a way to modify that behaviour through policy interventions (Terrain of Systems). The only thing missing is the Terrain of

[463] Eldar Shafir (ed), *The Behavioral Foundations of Public Policy*, Princeton University Press, 2014, p.1.
[464] Richard H Thaler, Cass R Sunstein, *Nudge: Improving Decisions about Health, Wealth, and Happiness*, Yale University Press*, New Haven and London,* 2008.
[465] Shafir, *The Behavioral Foundations of Public Policy*.
[466] Executive Order No. 13707, *Using Behavioral Science Insights To Better Serve the American People* 3 C.F.R. 56365, 2015.

Cultures and the addition of some analysis around developmental issues, but the Order (a Terrain of Systems legal construct) covers both Person and Planet. It does not appear to be a model of which business is afraid,[467] particularly as the Order states:

> For policies with a regulatory component, agencies are encouraged to combine this behavioral science insights policy directive with their ongoing review of existing significant regulations to identify and reduce regulatory burdens, as appropriate and consistent with Executive Order 13563 of January 18, 2011 (Improving Regulation and Regulatory Review), and Executive Order 13610 of May 10, 2012 (Identifying and Reducing Regulatory Burdens).[468]

Although the Order does not cover off on the Polity (the Terrain of Cultures), it hints at shared political values:

> To more fully realize the benefits of behavioral insights and deliver better results at a lower cost for the American people, the Federal Government should design its policies and programs to reflect our best understanding of how people engage with, participate in, use, and respond to those policies and programs. By improving the effectiveness and efficiency of Government, behavioral science insights can support a range of national priorities, including helping workers to find better jobs; enabling Americans to lead longer, healthier lives; improving access to educational opportunities and support for success in school; and accelerating the transition to a low-carbon economy.[469]

Apart from a low-carbon economy, the other national priorities would likely find broad bipartisanship support, at least for the goal itself, as opposed to agreement on the exact policy or legislative methods that different political parties might use to achieve similar - or very different - ends. Such a policy tool also could provide a general mechanism for incorporating specific shared values, environmental or otherwise, and hence include the Polity. This is more fully explored in Chapter Five. Policy mechanisms like this Executive Order could allow for a strong inclusion of the Person, as the psychological disciplines brought to bear can interpret the Terrain of Experiences, through ecological lenses or others. This is further expounded in Chapter Six. From the point of view of Antarctic policy then, the adoption of a behavioral analysis framework like that promulgated in the Order would be useful, as the efficacy of this approach has been shown in a range of studies.[470] The recognition that cognitive and emotional limitations generally prevent people from being rational agents is a recognition of the importance of the interior, which can be usefully worked into an Integral Policy Triptych.

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[467] Francesca Gino, 'Why the U.S. Government is Embracing Behavioral Science', Harvard Business Review, September 2015. https://hbr.org/2015/09/why-the-u-s-government-is-embracing-behavioral-science, accessed 26 March 2016.
[468] Executive Order No. 13707, *op. cit.*
[469] *Ibid*.
[470] Timothy D. Wilson & Lindsay P. Juarez, 'Intuition is Not Evidence: Prescriptions for Behavioral Interventions from Social Psychology', *Behavioral Science and Policy*, 2015, 1(1), pp. 13-20.
Emily H Ho, David V Budescu, Mandeep K Dhami and David R. Mandel, 'Improving the Communication of Uncertainty in Climate Science and Intelligence Analysis', *Behavioral Science and Policy*, 2015, 1(2), pp. 43-55.

Behavioural policy in its simplest incarnation begins with a focus on Zone 6, the outside of the Terrain of Behaviours. But it is broad enough in scope to encompass, at least in a behavioural sense, Zone 5, the inside of that Terrain. This ecomode is probably less-well understood and infrequently applied to policy and politics, as it represents the interior structures and processes that give rise to the self-organisation of an individual holon, or its autopoiesis. While I recognise the need for this perspective, it has struck me that the use of autopoiesis is somewhat ironic. The concept posits a self-contained system, able to maintain, replicate or refresh itself by controlling its own composition and maintaining its own boundaries. This appears at odds with an integral approach, which recognises the tetra-arising of the four quadrants, and the complex effect this has on individuals and systems; hardly appearing to support a self-contained or autonomous individual holon. However, we must recall that one quadrant cannot be reduced to another. Even though all quadrants arise at once, each of the individual and collective holons has its own way of maintaining and regulating its composition and keeping its boundaries. However, as we will see in the section on understanding the inside of the Terrain of Systems through social autopoiesis, the components of any kind of autopoiesis (whether the interior interactions of a number of collectives, or those inside an individual) display holarchic properties. Beyond this, however, behavioural policy allows us to include disciplines and perspectives that provide an understanding of this objective interior structure or individual autopoiesis.

4.3 Social autopoiesis

The inside of the Terrain of Systems, or Zone 7, describes the self-organisation or social autopoiesis of those collective holons; the interior processes and structures that allow those systems to maintain their composition and define their boundaries. I think this is one of the more difficult terrains to navigate, although the rewards for doing so could outweigh the difficulties, particularly because an appreciation of these interior processes in separate Terrains also leads to an appreciation of the interior processes and systems that underlie all reality; a next-stage systems theory. I use Takashi Iba's pithy summary of an autopoietic system as "a unity whose organization is defined by a particular network of production processes of elements, not by the components themselves or their static relations."[471] Iba's application of autopoietic theory to creativity studies provides a useful primer on the background and definition of the theory and its application in the real world scenario of an observed increase in the numbers, and importance, of knowledge-workers. He traces the evolution of systems theories through first to third generations. First generation theories had the key concept of "homeostasis" or how a system maintains itself in spite of environmental changes.

[471] Takashi Iba, 'An Autopoietic Systems Theory for Creativity', *Procedia Social and Behavioral Sciences,* 2010, 2, pp. 6305–6625.

They focused on dynamic non-equilibrium systems, such as the general systems theories of Ludwig von Bertalanffy, the cybernetics of Wiener and Ashby and the social systems theories of Talcott Parsons.[472] The second generation focused on "self-organising" or dynamic equilibrium systems such as the dissipative structures of Prigogine and Nicolis, and the "synergetics" of Hermann Haken. [473]

The third generation brought the near-contemporary "theories of self-production, and their key concept was 'autopoiesis.' They focused on the mechanism of how a system itself is realized over time.[474] Humberto Maturana and Francisco Varela are the key authors associated with this generation, and applied their insights to biological systems.[475] It was applied to social systems by Niklas Luhmann.[476] Luhmann said that autopoietic systems "are not only self-organizing systems, they not only produce and eventually change their own structures; their self-reference applies to the production of other components as well."[477] This view of social autopoiesis accords reasonably well with the concepts of holons and related components of integral theory. By that I mean there is an emergence of new holons, agency appears to arise, and upward and downward causation is created. We can also view each quadrants or Terrain as having its own autopoiesis. As the holons or components in each Terrain co-arise, they can not only "produce and change their own structures," but can produce other components, not just in their own Terrain, but in other Terrains as well. In other words, a new holon or component arising in one Terrain can lead to the co-arising of new components or holons in the other Terrains, or at least the near- or actual potential for that new holon. The new holon can be explained through the relevant disciplines; within its own Terrain these disciplines have reducibility. But they cannot be used to directly explain the new holons in the other Terrains. They have their own reducible approaches. This accords with Wilber's contemporary views of a Kosmos consisting of the perspectives belonging to holons, such that existence is "being a perspective."[478]

For example, you don't have to believe in the universe or me for these two things to exist. However, although the molecules that make you up do not have consciousness or self-awareness, they have prehension or the most limited (but broadest) form of "awareness". This awareness is not some teleos that tells evolution how to run its course, but boils down to being able to make a lot of special chemical or other bonds and reactions, and particular behaviours under the influence of biological factors. Part of our objective existence is this prehension, this awareness, this "chemical-ness" of the

[472] *Ibid.*
[473] *Ibid*.
[474] *Ibid.*
[475] *Ibid*.
[476] *Ibid*.
[477] Niklas Luhmann, *Essays on Self-Reference*, Columbia University Press, New York, 1990.
[478] Esbjörn-Hargens and Zimmerman, *Integral Ecology,* p.64.

holons in our bodies that are elements and molecules and complex biological mini-machines (like DNA). Without our molecules' "awareness" or prehension of the systems they are embedded in, we would not exist. The way we see or smell or hear is bound by the (objective) limits of these chemicals, how they interact with higher-order systems like tissues and organs and then whole systems; that is the inside of the Terrains of Behaviour and Systems. The way we see or smell or hear is also, however, bound by the limits imposed by the interior of the Terrains of Experience and Culture. One cannot be reduced to the other or explain the other (as such), but all arise and weave their insides and outsides - and individuals and collectives - together into the reality we know. Beyond the autopoiesis "confined" to each Terrain, there must be an underlying autopoiesis that allows agency and communication (communion) between Terrains, that allows their self-reference to apply to the production of other components in these "other" systems.

The integral framework could present a way of understanding this apparent meta-autopoiesis, which *transcends but includes* all Terrains, all Niches and all ecoselves. Integral theory is a (meta)systems theory and the "maps" developed through it are external views of these meta-systems. Integral theory describes this exterior reality according to "being a perspective," but it is also able to describe the interior of these meta-systems through an integral autopoiesis, or what I call Ground Autopoiesis. Ground Autopoiesis is *the territory,* the thing you are trying to map, is an intangible that in the main we describe through the native perspectives. But, like other interior aspects of the Terrains, this interior tetra-arising Ground Autopoiesis can be understood (or at least experienced and navigated) by individuals within a Community of the Adequate. This is part of what I think Wilber means when he talks about the ascenders (heaven-bound) and the 'descenders' (Earth-bound) and the need to reconcile the two - and that integrative approaches present a way to do that.[479] Nondual awareness is one key. If we look at phenomenological approaches and the application of a developmental framework, individuals can have experiences ranging from the physical and gross, to the subtle, causal and then nondual.

In integral ecology these are the soma, psyche and pneuma niches.[480] So Ground Autopoiesis, or Ground Reality, could be said to be akin to nondual awareness. This Ground Autopoiesis is also what connects everything. It permits the self-reference within one Terrain to affect components in other Terrains. Integral theory could be a useful fourth stage in the development of systems theory. Its metasystems approach can transcend, but also include, the concepts of homeostasis, self-organisation, and autopoiesis. The further application of integral principles to autopoietic theory is beyond the scope of this thesis, but is one area that would pay dividends in developing, as it could

[479] Visser, Ken Wilber, p. 196-198.
[480] Esbjörn-Hargens and Zimmerman, *Integral Ecology,* pp. 199-207.

help to tease out the mechanisms underlying the interfaces between Terrains and Quadrants, providing an understanding of how things 'tetra-arise'.[481]

4.4 The Terrain of Systems: Antarctic policy, law, ecology and politics

Next I consider the outside of the Terrain of Systems, that is, Zone 8. This is the ecomode that allows us to objectively describe and analyse the collective legal, political, social and ecological systems affecting Antarctic policy and politics. Disciplines falling into this mode or Zone describe the outside of these systems - their objective appearance and manifestation to the world; in other words how Antarctica is defined by the external visible structures of legal, social, political and ecological systems. These include legal and policy regimes such as the Antarctic Treaty System (ATS)[482] and its related instruments, such as the 1972 Convention for the Conservation of Antarctic Seals (CCAS),[483] the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)[484] and the 1991 Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol).[485] They could also include complex ecological studies on krill, seals, birds or fish, or meteorological studies,[486] and also in this Terrain could be the gaining of an understanding of the policy discourse around Australian Antarctic policy.[487] By using these interobjective approaches we can help to get a deeper understanding of Antarctica. For example, Cheryl Marie Cordeiro, going beyond just

[481] Christian Fuchs and Wolfgang Hofkirchner, 'Autopoiesis and Critical Social Systems Theory', In *Autopoiesis in Organization Theory and Practice*, ed. Rodrigo Magalhães and Ron Sanchez, 111-129. Bingley, Emerald, 2009.

[482] Marcus Harward and Tom Griffiths, (eds), *Australia and the Antarctic Treaty System – 50 years of influence*, University of New South Wales Press Ltd, Sydney, 2011; Christopher C Joyner, 'The Antarctic Treaty and the Law of the Sea: Fifty Years On', *Polar Record*, January 2010, Volume 46(1), pp. 14-17; Oran R. Young, 'Governing the Antipodes: International Cooperation in Antarctica and the Arctic', *Polar Record*, 2016, 52 (263), pp. 230–23; Paul A Berkman, M.A. Lang, D.W.H. Walton and O.R. Young, (Eds), *Science Diplomacy: Antarctica, Science, and the Governance of International Spaces*, Smithsonian Institution Scholarly Press, Washington, DC, 2011.

[483] Marcus Haward, 'Contemporary challenges to the Antarctic Treaty and Antarctic Treaty System: Australian Interests, Interplay and the Evolution of a Regime Complex', *Australian Journal of Maritime and Ocean Affairs*, 2017, Vol. 9, No. 1, pp. 21–24.

[484] CCAMLR (Convention on the Conservation of Antarctic Marine Living Resources) of 20 May 1980 (1329 UNTS 48); Erik J Molenaar, 'CCAMLR and Southern Ocean fisheries', *The International Journal of Marine and Coastal Law*, 2001, Volume 16(3), pp 465-499; Robert J Hofman, 'Sealing, Whaling and Krill Fishing in the Southern Ocean: Past and Possible Future Effects on Catch Regulations', *The Polar Record*, 2017, 53(1), pp. 88-99.

[485] Rothwell, Scott and Hemmings, 'The Search for 'Antarctic Security,' p. 1.

[486] MC Kennicutt II, *et al*, 'A Roadmap for Antarctic and Southern Ocean Science for the Next Two Decades and Beyond', *Antarctic Science,* 2015, 27(1), pp. 3–18; Tanya M. Haupt, *et al.*, 'Further Support for Thermal Ecosystem Engineering by Wandering Albatross', *Antarctic Science,* 2016, 28(1), pp. 35–43; Trevor McIntyre, Ashleigh Donaldson and Marthán N Bester, 'Spatial and Temporal Patterns of Changes in Condition of Southern Elephant Seals', *Antarctic Science,* 2016, 28(2), pp. 81–90; SJ Lockhart and CD Jones, 'Biogeographic Patterns of Benthic Invertebrate Megafauna on Shelf Areas within the Southern Ocean Atlantic sector', *CCAMLR Science*, 2008, 15, pp. 167–192; T Iwami, *et al.*, 'Annual Changes in Species Composition and Abundance of Myctophid Fish in the North of South Georgia (subarea 48.3), Antarctica, During Austral Winters from 2002 to 2008', *CCAMLR Science*, 2011, 18, pp. 155–165; N Ratcliffe and P Trathan, 'Review of the Diet And At-Sea Distribution of Penguins Breeding within the CCAMLR Convention Area', *CCAMLR Science*, 2011, 18, pp. 75–114; SM Grant, SL Hill and PT Fretwell, 'Spatial Distribution of Management Measures, Antarctic Krill Catch and Southern Ocean Bioregions: Implications for Conservation Planning', *CCAMLR Science*, 2013, 20, pp. 1–19; D Kinzey, G Watters and CS. Reiss, 'Effects of Recruitment Variability and Natural Mortality on Generalised Yield Model Projections and the CCAMLR Decision Rules for Antarctic Krill', *CCAMLR Science*, 2013, 20, pp. 81–96.

[487] Jefferey McGee and Danielle Smith, 'Framing Australian Antarctic Policy: the 20-year Antarctic Plan and Beyond', *Australian Journal of Maritime and Ocean Affairs*, 2017, Volume 9(1), pp. 25-41.

international relations, shows how the developmental perspective of integral theory can be applied to the study ASEAN-EU relations and their efforts as regional integrators.[488] It is worth noting here that the IPT, as an intellectual construct, is also an example of an interobjective systems-based approach, although its implementation, of course, demands an 'all terrain' execution. Another Zone 8 approach that could be used is analysis of the politics of Antarctica, which, as well as engaging global politics, will also bring in the Person and the Polity, our personal views and beliefs and the various cultural values with which humans have invested the region and the cultural interactions around these issues, expressed through various institutional forums and international bodies such as the United Nations.[489] These personal and cultural values are further explored in chapters five and six. Other Zone 8 methods could include the review and analysis of economic use and relationships;[490] environmental impact assessment;[491] research on ecological systems;[492] strategic plans of government organisations and parliamentary or congressional committee reports;[493] and global legal principles.[494]

Alan Hemmings begins his exploration of Antarctic politics in the context of global geopolitics by describing the *external* political, policy, legal, social, global and ecological systems. But the realpolitik - and intersubjective - rubber soon hits the road, when he points out that when political justification for doing science in Antarctica is sought, "programme managers, even our enlightened scientists, are not adverse to dipping into the nationalism bucket" and "science is international and value - free until it isn't one of us doing it."[495] So there is the cultural aspect of national interest; science is done because it is the 'right stuff', but also because it gives you a seat at the (ATS) table. Hemmings reflects on the international relations and politics - and the connection between exploration, science and empire/nation building - and concludes that "Antarctica has always been a political space."[496] Technology has reduced its remoteness and this means economic interests have changed. In some future scenarios these interests are likely to become significant, and an intensification of Antarctic politics has already been underway over the past decade. As he notes "the Antarctic is now the

[488] Cheryl Marie Cordeiro, 'Regional Actors with "A Common DNA"? Analyzing ASEAN–EU Relations from the Perspective of Integral theory', *Journal of Integral theory and Practice,* December 2014, 9(2), pp. 1 – 20.
[489] Hemmings, Dodds and Roberts, 'Introduction: the Politics of Antarctica', p. 12; Aant Elzinga, 'The Continent for Science', in *Handbook on the Politics of Antarctica*, pp. 103-124; Alan D Hemmings, 'Antarctic Politics in a Transforming Global Geopolitics', in *Handbook on the Politics of Antarctica*, pp. 507-522.
[490] Jacquet, Blood-Patterson, Brooks and Ainley, '"Rational use" in Antarctic waters.'
[491] Tin, Fleming, Hughes, Ainley, Convey, Moreno, Pfeiffer, Scott and Snape, 'Impacts of Local Human Activities on the Antarctic Environment.'
[492] Whinam; Fitzgerald, Visoiu and Copson, 'Thirty Years of Vegetation Dynamics in Response to a Fluctuating Rabbit Population on Sub-Antarctic Macquarie Island.'
[493] Press, *20 Year Australian Antarctic Strategic Plan;* McGee and Smith, 'Framing Australian Antarctic policy'; The Australian Senate, *Australia's Future Activities and Responsibilities in the Southern Ocean and Antarctic Waters.*
[494] Rüdiger Wolfrum, Common Interest and Common Heritage in Antarctica, in *Handbook on the Politics of Antarctica*, pp. 142-151.
[495] Hemmings, 'Antarctic Politics in a Transforming Global Geopolitics', p. 507.
[496] *Ibid*., p. 508.

object of international rivalry. Its future, who will determine the pathway to that future, and who will be the beneficiaries, are all in contest."[497]

Importantly, Hemmings not only considers *what* is happening in Antarctica (the IPT's Planet) - that is, the exterior changes observed in the global political order, in Antarctic regulatory regimes, or in ecological systems, but he also considers the transitions occurring in the *framing* of Antarctica. While this framing is of course related to objective and interobjective matters, it is also highly dependent on relevant subjective (behavioural) and intersubjective (cultural) influences. As Antarctica is such a political space, its future will not necessarily be determined purely by objective structural or material effects, for example the potential exploitation of mineral resources. Rather, the key concerns - as noted by Oran Young - are the "normative discourses underlying governance systems and the principles that will guide human/nature relations as we move deeper into the Anthropocene",[498] and whether "shocks arising from transgressing 'planetary boundaries' will set in motion fundamental changes in the normative discourses we employ to think about human development and about the place of human societies within the Earth System."[499] Hemmings agrees with this and believes that to address these future changes the Antarctic Treaty System will need to incorporate "a wider suite of global principles and values, particularly those now widely embedded in international law and other global institutions. These include ideas around fairness, participation and transparency."[500] That is why consideration of the Polity, the "we", the Terrain of Cultures, is so important, whether the policy topic is Antarctica or Zimbabwe. And that is why, in developing an integral discourse for politics and democracy, I believe, at least initially and in teasing out concepts, a fairly broad brush is required. In trying to propagate this discourse we would be well served by including existing ecological- or democratic - based theories, models and narratives that have one of more threads of integrative thought already embedded. Robyn Eckersley's work is particularly relevant, as it incorporates the use of this "suite of global principles and values" and the global institutions in which they are embedded, and the inculcation of such institutions with (critical political) ecological values.[501] The use of this broader approach may seem to exclude a deeper philosophical analysis of the underpinning philosophies. However, as previously noted, the main

[497] *Ibid.* The role of complex global politics in environmental matters like the governance of Antarctica or climate change underscores the need for an integral framework that is able to make sense of the dynamics underlying such politics. See also Maximilian Terhalle and Joanna Depledge, 'Great-power Politics, Order Transition, and Climate Governance: Insights from International Relations Theory', *Climate Policy*, 2013, Volume 13, No. 5, pp. 572-588.

[498] Oran R. Young, 'Foreword: Why Should We Take an Interest in What Happens in Antarctica?', in *Handbook on the Politics of Antarctica*, pp. xiv - xvi, p. xvi.

[499] *Ibid.*

[500] Hemmings, 'Antarctic Politics in a Transforming Global Geopolitics', p. 517.

[501] Eckersley, *The Green State*; Christoff and Eckersley, *Globalization and the Environment;* Robyn Eckersley, 'National Identities, International Roles, and the Legitimation of Climate Leadership: Germany and Norway compared', *Environmental Politics*, 2016, Volume 25, No.1, pp. 180-201, p.180.

focus of this thesis is to sketch out a model primarily for scientific metatheorising, not to carry out a deconstruction of any underpinning theory. In the case of an integral normative discourse or an integral *Polity* - around Antarctica, and in general - this metatheorising takes the form of examining the stages or levels through which both ecological politics and democracy more broadly have developed; examining Eckersley's critical political ecology; seeing how these developmental models and political ecology (ecologies) can be given an integral sheen; and then working out how it can inform the IPT model. This is entirely in accord with Edwards' approach to the use of theories as the data for metatheorising; the 'level' of the theory is not specified and, indeed, he does not seem to preclude the use of broader theories that are already partly-integral in nature, such as critical political ecology. With this in mind I explore in the following chapter the second element of the IPT; the Polity.

5. Polity

5.1 Polity: Understanding and Developing the Terrain of Political Cultures

> There've been numerous reviews and inquiries into election losses and this new theme of volatility, this has happened many times. And every single one of them, from what I can see, has talked about a lack of philosophy and values: Where is the big idea? What does the Coalition want to be in power for? In the end, philosophy and values are what's missing here and people are on to it. The parties' own reviews and inquiries have found that time after time after time, but there's something in the psyche of the political professionals that makes them incapable of learning.[502]

In the previous chapter, I looked at the disciplines and systems approaches that should be considered in any integral project using a Policy Tryptic. In particular, I focused heavily on the Planet, the objective and interobjective behavioural and systems theories which have large and rigorous Communities of the Adequate. The ecological and climate sciences of Antarctica are well delineated. But as we saw, because scientific activity in Antarctica is implicitly linked with sovereignty, territoriality, and general global political issues, the influence of Antarctic science on relevant policy and politics is perhaps more significant than in other areas of science. Hence the analysis of the exterior of national and global political, ecological, or social systems is critical; beginning with these methods as part of the Planet gives us a good robust base for understanding. When it comes to Antarctica then, the Planet is well accommodated. As I showed in Chapter 4, the efficacy of this approach could also be usefully boosted by the adoption of some behavioural science approaches. As we will see in Chapter 6, the Person aspect can be dealt with through self-analysis and adoption of particular personal, policy, political and business processes and practices. However, I believe that the next aspect of the Tryptic, the Polity, the "we" or the Terrain of Cultures, is a more difficult to map than the Person and Planet. As we will see in this chapter, through focus on the work of Robyn Eckersley and John Keane, the state is unable to form, or at least be sustainably maintained, without the communications and cultural interactions that give rise to interobjective understanding of - and general agreement on - policy goals, societal laws and mores, and the legitimacy of political and other institutions. As we saw with Antarctic policy, the future is predicated not only on the materials and structures of governance and societal institutions, but on the types of normative discourses that exist in relation to Antarctica.[503] The development of an integral ecological norm is therefore required; this is the broad aim of the Polity. The nature of such norms is that they are fleshed out at a general level, then given more practical effect through specific applications, in this case Antarctic policymaking. The key theoretical-level data used for the Polity aspect of the IPT are Eckersley's critical political ecology (underpinned by an ecological adaptation of Habermas), her theoretical "green" state , and John Keane's monitory democracy. By interpreting the near-integral nature of the

[502] Anne Tiernan, http://www.abc.net.au/radionational/programs/theminefield/election-2016-are-the-voters-to-blame/7578166, retrieved 13 September 2016.
[503] Young, Foreword: Why Should We Take an Interest in What Happens in Antarctica?, p. xvi.

work of Eckersley, Habermas and Keane, I hope to provide a base integral philosophy that will provide a normative discourse for ecological politics in general. As we have seen, when Antarctica is our policy and political subject, its sustainable future is likely to require the teasing out of a broad base of integral values which will need to be inculcated into national and global institutions and organisations.

The online Oxford dictionary defines polity as "a form or process of civil government or constitution", or "an organised society; a state as a political entity."[504] These are clearly useful objective and interobjective descriptors of what a polity is, the word coming from "mid-16th century: from obsolete French *politie*, via Latin from Greek *politeia* 'citizenship, government', from *politēs* 'citizen', from *polis* 'city'."[505] While democracy has evolved past the city-state, the word recognises coherent political units or entities which now may span continents rather than Athenian metropolises. The definition is useful in that it also recognises polity as a *process,* involving complex cultural interactions between subjects. By itself, it does not necessarily invoke *democratic* processes, but it certainly points to a central political, legal (and/or religious) text or constitution in accordance with which a nation-state operates. However, one other term for Polity could be used and that is the "demos", those citizens involved in the processes of democracy, the "people" as outlined by Keane.[506] Another useful definition is that adopted by Craig Carr, who notes that the idea of a *polis* or polity springs from the ancient Greek meaning of the term for a wall:

> Walls enclose and exclude, and this is a good way to understand politics. Politics brings some people together to form a group, and it leaves others outside the group. It brings into being a *sense of "we"*, and by so doing it necessarily also gives rise to a sense of "they." [507]

The Focus in the "Polity" component of the Integral Policy Triptych, then, is on understanding the cultural interactions and shared meaning that makes the "we" and the "they"; those essential cultural interactions that underpin the nation-state or other smaller political units such as electorates or "states" within nation-states. It is hoped that this greater understanding will help shape integral policy, integral politics and a broader integral political philosophy or philosophy of democracy. We want to particularly understand the "we" of the policy equation or political situation, or the Terrain of Cultures. Key to this is the use of Zone 3 and Zone 4 ecomodes (for example, hermeneutics and ethnomethodology).[508] However, we also want to at least imagine what an

[504] http://www.oxforddictionaries.com/definition/english/polity, accessed 4 May, 2015.
[505] *Ibid*.
[506] Keane, *op. cit.*, p. xi.
[507] Craig L. Carr, *Polity: Political Culture and the Nature of Politics*, Rowman and Littlefield Publishers, Lanham, MA, 2007, p. 2, emphasis mine.
[508] See Chapter Two.

integral polity might look like more broadly, from the inside and outside of culture as described above, to the objective behaviour of its citizens, the inner organisation and outer manifestations of its interobjective political and economic systems, and the individual beliefs and experiences of the citizen herself. Therefore, rather than focus on more "narrow" intersubjective perspectives that might be related specifically to Antarctic policy, I wanted a higher-order intersubjective approach that could inform policy and politics in general. To provide this foundation, I focused on the excellent intersubjective-based disciplines outlined by Robyn Eckersley in her examination of the use of the modern liberal democratic state to move towards an ecological state, and her more recent works analysing the impacts and opportunities of globalisation.[509] In the following example the beginnings of a broader integral political philosophy and politics are sketched out. It is based on an integral adaptation of Robin Eckersley's *The Green State* and one of the key philosophies underlying that work, the critical theory-inspired - but expanded to include non-human nature - critical political ecology. An Integral Polity assumes the presence of at least a reasonably healthy democracy, albeit democracy in the "unfinished" sense, as described by John Keane in his comprehensive "Life and Death of Democracy," where:

> what we mean by democracy changes through time...democratic institutions and ways of thinking are never set in stone; and...because they are the most power-sensitive polities ever known to humanity, democracies are capable of democratising themselves, for instance by inventing new ways of ensuring equal and open public access of citizens *and their representatives* to all sorts of institutions previously untouched by the hand of democracy.[510]

It is precisely the invention of new ways and new institutions - or the populating of old institutions with new ways - where the "Polity" aspect of the integral Triptych has utility. Polity focuses on shared political morals, mores, and communications; the "inside" of culture. Thus it is an ideal place to articulate what an integral political philosophy would look like from the inside, from the perspective of the social holon that is a polity (nation-state, electorate). What would its shared political mores look like? How would they appear in the intersubjective world of culture? What would the complex external manifestations of social holons or institutions look like? How do we move towards establishing such a culture, an integral political, economic, social and environmental holon? This examination will not answer all of these questions in full and the moving feast that is democracy will likely escape exact prediction. But some broad strokes, a general orienting map, may still prove useful for policymakers, party members, advisers and politicians alike. Beyond Antarctic policy, an integral political philosophy could potentially point out a useful ecological way forward that could find a broad fit within progressive, or, even, conservative parties - the latter perhaps in

[509] Christoff and Eckersley, *Globalization and the Environment.*

[510] Keane, *The Life and Death of Democracy.*, p. xxix. Of course, there are many who would argue that democracy may not be too healthy at the moment.

balance of power with sound-minded independents or "bright" greens; for an integral approach would not necessarily discount such a parliamentary or congressional arrangement.

5.2 Habermas and Eckersley

The base of this political philosophy is an integral form of Eckersley's green state and her critical political ecology, set in a "post-emancipatory" age for ecological politics. Also, I use an integral modification to Keane's pragmatic view of what he calls post-Westminster "monitory" democracy.[511] In this chapter I show how Eckersley's critical political ecology has some integral content, as it is based on Habermasian critical theory. As we saw in Chapter 1 Habermas's approach is also multi-perspectival; with his terms of objective truth, subjective sincerity, and intersubjective justness being a key inspiration for Wilber's quadrants. Habermas posits that social (collective) action occurs across two domains: the "lifeworld" and the "system", which are equivalent to EZI's Terrain of Cultures and Terrain of Systems respectively. The lifeworld is constituted through "communicative action",[512] which is action focused on reaching shared understanding. It is the interior perspective, and the significance of an action will depend on what it means to a person, which in turn relates to the person's cultural milieu.[513] The system is constituted through what Habermas calls "strategic action", which is action focused on achieving an objective. Hence, it is the exterior perspective. He not only recognises the differentiation of the two domains,[514] and that they are explained or understood in different ways, but that development and evolution occurs in each domain and the complexity of the system and the rationality of the lifeworld increase over time.[515] Evolution in the lifeworld domain is called by Habermas "rationalisation", which reflects an increase in moral learning and an increased capacity to permit "interactions that are guided – directly or indirectly – by communicatively achieved understanding."[516]

Evolution in the system domain results in an increase in the "steering capacity" of society.[517] The increases in complexity, scope, and institutional and organisational capacity have had many benefits. However, changing worldviews from the Enlightenment onwards (see chapter 1) meant that there

[511] *Ibid*., p. xxvii.
[512] Jürgen Habermas, *The Theory of Communicative Action Volume 1: Reason and the Rationalisation of Society*, trans. T. McCarthy., Polity Press, Cambridge, 1990; Jürgen Habermas, *The Theory of Communicative Action Volume 2: Lifeworld and System: A Critique of Functionalist Reason,* trans. T. McCarthy., Polity Press, Cambridge, 1992.
[513] Jürgen Habermas, *Moral Consciousness and Communicative Action*, p. 25.
[514] Habermas, *The Theory of Communicative Action Volume 2*, p. 152.
[515] Ibid., p. 153.
[516] Habermas, *The Theory of Communicative Action Volume 1*, p. 340.
[517] Habermas, *The Theory of Communicative Action Volume 2*, pp. 152-153.

was a disconnection from traditional communicative action, which had previously been able to reach (at least a good level of) shared understanding. This process is called by Habermas "systematization": the separation of interobjective systems of social action from the normative discourse that determines the subjective sincerity, the "rightness", of such systems. This disconnection allowed for the development of "steering media". Such institutions divorce strategic action from communicative action, and, instead of drawing full meaning from the lifeworld or shared cultural values, significance is given instead to "generalised instrumental values such as money and power."[518] However, Habermas recognises the two-way nature of the lifeworld-system society. Particular worldviews develop in the lifeworld domain and then the values and shared meanings are inculcated into the organisations and institutions in the system domain. Strategic (social) actions are then carried out by these institutions, and such actions are important for systemic autopoiesis, that is, the maintenance and stability of the system.[519] Worldviews that underpin institutions able to solve problems in the system are, not surprisingly, more successful. In other words, problem solving worldviews are institutionalised. An integral interpretation of this is that these evolving "rationality structures"[520] become more inclusive - they transcend and include - and hence are potentially able to understand and address a wider range of system crises. While communicative action is the progenitor of the lifeworld, Habermas identifies the multiperspectival nature of communication (and hence of his communicative action); how language works to interrelate the three "worlds" - the external (inter) objective world, the lifeworld, and the inner world of individual experiences.

I have surveyed Habermas's *objective truth* (of the system) and *intersubjective justness* (of the lifeworld), but there is also his *subjective sincerity* to examine. This equates to the Terrain of Experiences, or the "I". As noted above, Habermas envisages an increase in moral learning that provides individuals with an increased capacity to reach shared understanding. Given the global nature of many of the environmental crises we face, more and more solutions require an integral approach. For example, the worldview of an eco-holist is a problem-solving one, as it allows the acceptance of a multitude of values and perspectives, even those contradictory to the eco-holist's own.[521] The ability to hold conflicting truths would be paradigmatic for an ecological critical theory and the emergence of legitimate environmental law - or other institutions - "from the discursive opinion and will formation of equally enfranchised citizens."[522]

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[518] Habermas, *The Theory of Communicative Action Volume 1*, p. 342.
[519] Jürgen Habermas, *Communication and the Evolution of Society*, trans. T. McCarthy., Polity Press, Cambridge, 1984, p. 160.
[520] Habermas, *The Theory of Communicative Action Volume 2*, p. 314-316.
[521] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. 233.
[522] Jürgen Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, MIT Press, Cambridge, MA, 1996 p. 408.

Thus we see that Habermas is also in the company of integrative thinkers; his realms are similar to the quadrants, terrains, or the three aspects of the IPT. He also has an explicitly developmental and evolutionary aspect in his theory. Habermas is, therefore, an excellent base for Eckersley's critical political ecology and hence for the IPT. However, non-human nature is, by definition, not equally enfranchised in Habermas's' thought and cannot directly participate in the discourse in the lifeworld. Eckersley remedies this by expanding Habermas's ideal dialogue to include the non-human world, in effect calling for a planetcentric or worldcentric ethic to underpin democratic and public deliberation around norms. In this adaptation, rationalisation or evolution of the lifeworld does not limit the capacity for a type of communicatively achieved understanding between humans and non-human nature. Eckersley's critical political ecology bears the multiperspectival and developmental nature of its base theories. However, she does not *explicitly* describe her developmental framework in relation to critical political ecology. But her earlier works contain the seed of such a framework in the form of her "tripartite" for the development of ecological politics within a polity. Using an integral ecological approach, I extend her three-stage framework of participation, survival, and emancipation to include a fourth stage: "integration." I add to the developmental aspect of the polity by comparing her reasonably recent three stages, occurring over the past fifty-odd years, with Keane's tracking of the development of democracy across wider times and spaces; through the stages of assembly, representative and modern monitory democracies spread over the last 3,500 or so years. Through an Integral filter, Eckersley's Green State becomes what I call the Yellow or Teal State as it is already strongly infused with an integral approach. She acknowledges the developmental aspect in the following description of the graduated response of policy actors (in this case, individuals) to effects arising in both the material or instrumental (objective and interobjective), cultural (intersubjective) and individual (subjective) terrains. Many of the moral stages discussed as part of the self or ecoself are recognisable.:

> social actors may cooperate or otherwise conform to social norms or legal rules for a range of different reasons. They may conform out of a fear of punishment [coercion], or because they believe that following the norm/rule is in their own self-interest, or because they accept the norm/rule as legitimate.[523]

Analysis that only looks at self-interests as revealed by external behaviours, that is the Planet, will be limited. In Chapter 4 we saw how the use of behavioural science, where it is not assumed that people make rational choices, can provide some subjective and intersubjective insight. A purely objective analysis may predict that states, particularly those with substantial material (objective and

[523] Eckersley, *The Green State*, p. 35-36.

interobjective) power, will always act in a certain way. While the "considerable material capabilities" of some states has certainly led to coercive activities by those states, this does not always happen, with the likelihood of the deployment of such capabilities being best determined by understanding the "context of the histories and social relationships of self/other between *particular* social actors."[524] Eckersley notes that while "self-interested behaviour entails a continuous instrumental calculation of outcomes in accordance with pre-given, self-interested goals, the acceptance of norms as legitimate necessarily works at the intersubjective level." Here, the exterior behaviour of individual and collective social actors (Terrain of Behaviours and Terrain of Systems) arises alongside worldviews generated from communicative action in the sphere of the lifeworld, the Terrain of Cultures. Thus a norm may gain legitimacy in the eyes of an actor only to the extent to which they have adopted it as part of their worldview and have at least some of their interests transformed by it.[525] We have already seen this in the case of the ecoselves, and the way that the individual ecological "centres of gravity," can change or at least be affected by shared understanding and possibly acceptance. Hence, "what might have started out as a purely instrumental calculation by social agents may end up transforming the self-understanding and identity of such agents."[526]

This may be the case for the policy and politics of Antarctica and, for example, of climate change. Despite frequent appearances to the contrary, Antarctica is not a place of pure science.[527] Engagement in the region is linked very much to the interests of individual states. [528] However, the instrumental investment in science returns data on climate change and its impact on the region that is difficult to ignore. Antarctica is a place where Oran Young's "shocks arising from transgressing 'planetary boundaries'"[529] are already apparent. This has already activated changes in the normative discourse on Antarctica, and has also helped to activate changes in discourse on climate change.[530]

Eckersley's critical political ecology, which gives nature an indirect electoral franchise, is based on the idea that "revolutions in sovereignty stem from prior revolutions in ideas about justice, political authority and rightful conduct."[531] Such ideas exist in the Terrain of Cultures and it is here in the intersubjective realm that a polity - in this case individual states - need to reach broad agreement on the legitimacy of these ideas. An understanding of the exterior political behaviour and social structures of individuals and states (as described through the Terrains of Behaviour and Systems) is

[524] *Ibid*., p.37, emphasis in original.
[525] *Ibid*., p.36.
[526] *Ibid*.
[527] Elzinga, 'The Continent for Science.'
[528] Hemmings, 'Antarctic Politics in a Transforming Global Geopolitics', p. 508.
[529] Young, Foreword: Why Should We Take an Interest in What Happens In Antarctica?, p. xvi.
[530] Hemmings, Dodds and Roberts, 'Introduction: The Politics of Antarctica', p.4.
[531] Eckersley, *The Green State*, p.37.

still required, but it is one of a suite of perspectives used. Eckersley notes that there is no reason to regard a state's sovereign, materialist, coercive, and self-interested actions as "default explanations, as if culture and moral norms have only secondary importance."[532] There is, therefore, unlikely to be a state based purely on coercion or purely on consent/legitimacy. Eckersley notes how a state based purely on coercion would likely be "unstable, and costly" and draws attention to two possible ways to establish and maintain enduring influence: through legitimate power, based on the free consent of those ruled; or hegemonic power, based on a mix of coercion and consent.[533] As Keane points out, even empire building demands respects for local habits[534] and so today "hegemony is not simply a function of economic and military material capability; rather, it also turns on whether a state is able to shape the international order according to norms and rules that mostly suit its interests but are more or less accepted by others as universal."[535]

5.3 The integral monitory state: Stages of Ecopolitical Thought and the Development of Democracy

Critical political ecology is based on an integrative approach. It does not dismiss out of hand the use of empirical, calculating approaches to understanding the behaviours of individuals and collectives or systems, but *populates* these objective and interobjective approaches with the "the histories and social relationships of self/other."[536] Eckersley's works also strongly recognise the developmental aspect of the ecological state. This is shown in her "three stages" in the development of ecopolitical thought over recent decades, being: "participation, survival and emancipation."[537] These are detailed below; the "emancipation" stage is one for which Eckersley has continued to flesh out a political theory, through *the Green State* and more recent works on globalisation and the environment.[538] She further bolsters her developmental approach with recognition of several discrete yet overlapping stages of ecological discourse and critique in relation to the state. Leninist critiques of the capital-labour tensions in the welfare state in the 1970s became a debate about sustainable development in the 1980s and 1990s, before moving to a more systems-based approaches in the past decade, when critiques of the state, including those with an ecological bent, were forced to confront the move to a competition state and a globalized state, where governments have moved "away from the idea of the state as a protector and provider of public goods and

[532] *Ibid*., emphasis mine.
[533] *Ibid*., p. 38.
[534] Keane, *The Life and Death of Democracy*, p. 98.
[535] Eckersley*, The Green State*., p. 38.
[536] *Ibid*., p.37.
[537] Robyn Eckersley, *Environmentalism and Political Theory: Towards and Ecocentric Approach*, SUNY Press, Albany, 1992, pp. 7-31.
[538] Christoff and Robyn Eckersley, *Globalization and the Environment.*

services towards the notion of the state as a facilitator of privatization, commodification, marketization and deregulation."[539] Eckersley's own recent works address this modern era of globalization. While the main focus is on her three stages and my additional fourth stage based on integral principles, it is worth keeping in mind John Keane's history of democracy and his nominal three stages, as his monitory democracy is key to an integral monitory state, which will also include the whole/parts of assembly and representative democracy.

Keane draws upon democracy's more ancient history (geological in nature if compared to a "day" in realpolitik-land, which itself can be quite long, or even compared to the relatively short history of ecological politics). The developmental path Keane tracks is of the amalgam of human government that is democracy, beginning with "assembly" democracy in ancient Mesopotamian and Mediterranean regions[540], and the Athenian adoption, reification and reinvention of democracy; moving to "representative" democracy, which arose from revolutions and evolutions across the world from the seventeenth century onwards; and then morphing into a modern and postmodern form known as "monitory" democracy, where the conventional power-checks of democracy are interlaced with complex power-monitoring processes and institutions.[541] I will return to this in the following section.

It is between the eras of representative democracy and postmodern monitory democracy that the four stages of the ecological state have occurred and are occurring. Ecological politics and democracy more broadly develop in a holarchical fashion. For example, emancipation transcends but includes survival, survival transcends but includes participation, and in the usual process that is development, elements of 'earlier' themes are present in 'later' stages, and vice-versa.[542] Monitory democracy transcends but includes representative democracy, and representative democracy transcends but includes assembly democracy. Indeed, Keane has drawn attention to the fact that "all of the new power-scrutinising experiments in the name of 'the people' or citizens' empowerment rely inevitably on *representation*."[543] I propose an "Integral Monitory Democracy" which is an integral approach that aims to transcend but include assembly, representative and monitory democracies. It includes Eckersley's tripartite, but also uses a broad base of policy and political actors, in this case the "monitoring institutions" of modern democracies, to achieve otherwise ecological ends. For Keane, the later stages of representative democracy and early stages of his post-representative or monitory democracy also set the stage for an ecological politics:

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[539] Eckersley, *The Green State*, pp. 56-67.
[540] Eric W Robinson, *The First Democracies: Early Popular Government Outside Athens*, Franz Steiner Verlag, Stuttgart, 1997; Yves Schemeil, 'Democracy Before Democracy?', *International Political Science Review*, 2000, 21(2), pp. 99-120.
[541] Keane, *The Life and Death of Democracy*, pp. ix - xxix.
[542] Eckersley, *Environmentalism and Political Theory*.
[543] Keane, *The Life and Death of Democracy*, p. 699.

> And for the first time ever, there are even creative efforts to 'green' democracy. Time and money and energy are invested in building bio-monitoring institutions geared to the principle of public scrutiny of those who exercise power over our biosphere, which in effect is granted a virtual vote, a right to be represented in human affairs. There are growing numbers of examples of these experiments in 'democratising' our interactions with the world of nature, in whose affairs we act as if we are an outlaw species, with criminal tendencies. Independent monitoring bodies responsible for whole geographic regions and civic organisations sponsored by friends and protectors of the earth are cases in point.[544]

This enfranchising of non-human nature means nature can - at least indirectly - be included in the communicative actions that give rise to ecological worldviews. However, as we have seen, the lifeworld is subject to the effects of systemisation and this can work against these types of ideal communicative action. Earlier worldviews were successful in solving earlier crises and hence were selected over other worldviews.[545] The entrenched systems that were formed through these views are very likely working against an ecological state

> these contradictions - to provide for the interests of private capital *and* to dampen social unrest by ironing out the negative social externalities of capitalist accumulation - cannot all be resolved simply by pursuing more efficient or more effective economic management and administration. Rather, these tensions can only be "politically managed" because few governments are prepared to risk serious economic dislocation or any cessation or major curbing of economic growth in the name of environmental protection; to do so would merely hasten their political demise.[546]

Keane is not just concerned about the demise of, or the inability to achieve an ecological politics. He highlights the real historical contingency of democracy itself and that it has no historical guarantees. But he also recognises its strengths, as we saw above, due to not being set in stone, being sensitive to power, such that democracies can invent new democratic processes and institutions where there were none before. Here the developmental individual personal or collective cultural ecological perspectives or ecoselves described in Chapter Two (amber, orange, green, turquoise) may have some application. These can provide some understanding of the ecological or democratic stages from a number of different ecological viewpoints, but also give insight into how we might move towards an integral polity. The basic framework of the quadrants can also be useful as a developmental heuristic, as various stages or waves of development are reflected by particular focus on only one (or two) quadrants. For example, in Eckersley's tripartite Participation was predominantly about the "I," the importance of one person, one vote with suffrage for all. It was about groups of disenfranchised peoples and was therefore mirrored by elements in the objective, interobjective and intersubjective realms, but it was largely about a being's right to *experience* its rights; for example, to *not* have to experience air pollution. The next stage, Survival, was about the

[544] Keane, *The Life and Death of Democracy*, p. xxviii; Brian Doherty and Marius de Geus, Eds, *Democracy and Green Political Thought: Sustainability, Rights and Citizenship*, Routledge, London, 1996.
[545] Habermas, *The Theory of Communicative Action Volume 1*, p. 342.
[546] Eckersley, *The Green State*, pp. 55-56.

"Its," the pure scientific facts and the constraints and risks placed on us by basic numbers - resource limits - as well as more complex ecological interactions; it focused on the objective and interobjective realms. Thus, it also corresponds with decades where ecological legislation came into being along with environmental watchdogs, both governmental and non-governmental. Eckersley's third stage, Emancipation, is focused heavily on the intersubjective realm. Emancipation calls for a strong element of shared communications and commonly-held values; underpinned by the ethical and free movement of information between all agents. It also calls for the "good" state. Goodness is a value understood and often practiced between the subjects in a culture, but must also be underpinned by "good" systems in the interobjective realm; legislation, conventions, education, economics, political and legal systems, processes that ensure that people's objective observed behaviour is appropriate. Eckersley's tripartite provides a useful characterisation for identifying overarching elements in recent and current ecopolitical theory.[547] In particular, the "emancipatory" incarnation of ecological politics could potentially be more fully realised through applying an integral framework.

The further development of this cultural-political line is explored by giving an integral patina to the emancipation stage and to Eckersley's conception of the Green State. While I provide additional detail on her tripartite below, I first indicate the possibility of a fourth stage in ecological politics, being "integration." This stage is underpinned by Eckersley's "good" state, and held in check through Keane's monitory actors or institutions, some of which would use integral principles. Keane's three stages provide what I like to call a democratic "geological crust." Like the evolution of life, democracy, and indeed ecological democracy, could only come about once the right elements and energies were present. The rise of a mature ecological politics is barely five decades old, but the evolution of the modern democratic processes and institutions that have led to such politics has a history that is likely to be two orders of magnitude greater. Without the early traditions and customs of assembly developed in Syria-Mesopotamia between 3000 and 1200BC, the practicing of assembly democracy by the ancient Athenians and the adoption of representative democracy from the seventeenth century onwards by a number of nation-states, monitory democracies, those probably most conducive for a post-emancipatory ecological politics, would not exist.

Because representation is such a well-established political convention, emancipation is possible; political candidates or members of parliaments are able to legitimately represent this "other" - nature. Even non-green members of parliament may well acknowledge "the other" - for example, by pushing for or supporting laws to prevent, avoid or mitigate animal suffering. The broader

[547] Eckersley, *Environmentalism and Political Theory*, p.8.

environment is often dismissed as just that, the (objective and interobjective) "environment," which is important but not as pressing as other political issues. The emancipatory stage, as we will see below, springs from Athena's intersubjective head; it calls for a reworking of culture, to make "the other" something (the "environment") or someone (for example, Colin the homeless dachshund) who can be represented in policies and politics. Eckersley recognises that most modern philosophies would be hard-pressed to deal with such a reworking and reanalysis of culture.[548] That is why in the Green State she uses Habermas's integrative approach.

5.4. Stages of ecopolitical thought: participation, survival, emancipation and integration

5.4.1. Participation

The 'participation' theme can be generally identified with the 'crisis of participation' that occurred in the 1960s, during which groups excluded from the political process attempted to rectify the unequal distribution of environmental 'positives' (such as urban amenity) and 'negatives' (such as pollution).[549] Both political theorists and policy makers viewed the environmental movement as just another aspect of the civil rights movement. This view was particularly marked among socialist, social democratic and liberal welfare theorists.[550] Hence the radical environmental protests of the 1960s came to be viewed as a facet of the New Left. Despite this, the environment movement came under attack from labour, socialist and liberal welfare theorists when the social impact of environmental reforms became apparent. They viewed environmentalism as a middle-class movement that threatened working class aspirations.[551] Despite these criticisms, much ecopolitical thought *was* subsumed into the goals of the New Left, which proposed greater autonomy and control for both the individual and communities.[552] Eckersley considers these participatory values to be a necessary part, although not the totality, of a mature ecological politics.[553] As suggested above, much of the participatory momentum came from the new power of the subjective, or the "I." Of course, this stage unfolded in all four quadrants, across all four ecological territories. In particular, it was backed by powerful communal forces that led to a broad consensus on who should be able to participate. But the power of one was key.

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[548] Eckersley, *The Green State*, p. 21.
[549] *Ibid*.
[550] *Ibid*.
[551] Sandor Fuchs, 'Ecology Movement Exposed', *Progressive Labor*, 1970, 7, pp. 50-63; D. Wells, 'Resurrecting the Dismal Parson: Malthus, Ecology, and Political Thought', *Political Studies,* 1982, 30, pp.1-15.
[552] Eckersley, *Environmentalism and Political Theory*, p.10; Hans Magnus Enzensberger, 'A Critique of Political Ecology', *New Left Review*, 1974, 84, pp. 3-31. Hay, *Main Currents in Western Environmental Thought*., pp. 261 – 262.
[553] Eckersley, *Environmentalism and Political Theory*, p.11.

5.4.2 Survival

The 'survival' theme became ascendant in the early 1970s, when empirical evidence showed that the exponential growth of the human population (and resulting increase in resource use) was leading to large-scale environmental impacts. The view that there was a threat to the very survival of humanity, the so-called 'environmental crisis', was given prominence by two publications. These were the Club of Rome's *The Limits to Growth*[554] and *The Ecologist* magazine's *Blueprint for Survival.*[555] Their 'doomsday' message was promoted by the world's media, leading to a greater understanding of the global implications of environmental degradation.[556] This reaction, amplified by the 1973-74 oil crisis, stimulated widespread demand for swift governmental action and resulted in the establishment of Europe's first Green party.[557]

The ecopolitical literature of this period was predominantly concerned with human survival and had a practical, empirical (upper-right/objective) ideology. The greater participation and freedom proposed by the New Left was all but ignored. Instead, much of the literature focused on a centralised and interventionist government, possibly controlling both the population and the distribution of resources.[558] Many theorists of this time supported some type of authoritarian solution to prevent environmental degradation.[559] Probably the most well-known manifesto of authoritarian environmentalism is Garrett Hardin's "Tragedy of the Commons." Here, the selfish use of a common resource will always be the main choice for beings making rational choices and therefore the commons (read environment) will always be degraded or destroyed.[560] This approach was extensively criticised, particularly by socialist theorists, who believed it would freeze in place the inequality between rich and poor. They believed it would enhance an already entrenched state legitimisation for the environmentally destructive activities of powerful elites.[561] Some political theorists of the New Left questioned the ability of liberal democracy to address the ecological crisis. They called for a revolutionary reworking of liberal values, such as possessive individualism, private

[554] D.H Meadows, Meadows, D.L, Randers, J, Behrens_III, W.W, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, Universe Books, New York, 1972.
[555] Edward Goldsmith, Robert Allen, Michael Allaby, John Davoll, and Sam Lawrence, 'A Blueprint for Survival', *The Ecologist* January 1972, Vol. 2 No. 1. pp. entire edition.
[556] Eckersley, *Environmentalism and Political Theory*, p.12.
[557] *Ibid*.
[558] *Ibid*., p.13.
[559] *Ibid*., p.15.
[560] Garrett Hardin, 'Tragedy of the Commons', *Science,* 1968, 162, pp. 1243 – 1248.
[561] Eckersley, *Environmentalism and Political Theory*, p.16.

property rights, small-scale or limited government and market freedom.[562] Some of the authoritarian environmentalists were engaged in an earlier form of futures studies, an area of research from which an integral policy practitioner could benefit. Also, a form of futures studies using integral principles has been developed.[563]

5.4.3 Emancipation

Although heavily criticised, the survivalists contributed to the development of ecopolitical thought by bringing attention to the serious nature of human impacts on nature and stimulated others to challenge existing values and institutions. This provided fertile ground for the later development of alternative theories, laying the foundations for an emancipatory ecopolitical ideology. The survival stage was dominated by population ecologists and doomsayers alike, haranguing about the limited resources for an expanding population; and those who, with more nuance, but perhaps just as much reductionism, pointed to our place being firmly within the complex web of life and the biophysical systems of the planet. Their calls for changes to institutions were extremely effective in actually changing some of those institutions. As noted, decades of ecological legislation came into being as did environmental watchdogs both governmental and non-governmental. There is still a strong current running through this theme today, with ICCC reports, Environmental Sustainability Indexes and UN commissioned ecosystem assessments pointing out the hard objective and interobjective facts of ecological degradation.[564]

The survivalist school had focused primarily on *physical* limits to growth. Traditionalist and right-wing theorists and policy makers responded by arguing that this could be solved by a 'technological fix' approach and the development of free-market mechanisms.[565] Other critics of the survivalist approach took the opposite tack and began to question the basic tenets of industrial and material progress and its concomitant social costs. These included psychological alienation, loss of meaning, extreme inequality (financial and otherwise), dependence on welfare, disruption and loss of indigenous cultures, and the hegemony of an urban monoculture, leading to a reduction in cultural diversity. They viewed the ecological crisis not only as a crisis of participation and survival, but also as a 'crisis of culture'. Hence we arrive at the stage where intercultural communications and shared morals were the focus.

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[562] *Ibid*., p.17; Marc Sagoff, 'Environmental Ethics: An Epitaph', *Resources,* Spring 1993, pp. 2 – 7; Michael Jacobs, *Sustainability and Socialism,* Socialist Environment and Resources Association, London, 1995.

[563] Dennis Morgan, 'The Application of Integral theory to Futures Schools of Thought', *Journal of Integral theory and Practice*, 2012, 7(3), pp. 116–127; Richard A Slaughter, 'Making Headway During Impossible Times', *Journal of Integral theory and Practice*, 2012, 7(3), pp. 128–138.

[564] Christoff and Eckersley, *Globalization and the Environment*.

[565] Eckersley, *Environmentalism and Political Theory*., p.12.

The ecopolitical theorists of the late 1970s and early 1980s not only reworked the modern emancipatory ideal of human autonomy and self-determination, but they also developed an emancipatory political theory that re-evaluated the very *basis* of this autonomy.[566] To simplify, the "needs of the planet and the needs of the person" became one.[567] That was the new political reality for those who embodied this political philosophy. Many theorists criticised the 'technological fix' approach and called for an examination of real human needs and the development of 'appropriate' technologies.[568] Most importantly, these theorists saw within the cultural crisis an opportunity for a reinvigoration of culture, with a particular, but not exclusive, focus on civil society rather than the state.[569] They sought to develop theories that integrated the goals of the ecological movement with other new social movements, and to circumvent materialism and systems of domination.[570]

Eckersley notes that this is an audacious exercise and that modern political philosophies are generally not well equipped to contribute to it, although they may provide a starting point.[571] It is my contention that integral theory and integral ecology may be up to that challenge. As noted above, Eckersley places her Green State firmly in cultural ground underpinned by a critical theory approach. While not an integrative theory as such, critical theory recognises that for a complete understanding of society and its change processes, a diversity of disciplines and perspectives is required. It also recognises the importance of information on the historical development of a society and a description of how this development has played out to create the current situation. In those senses it is multi-perspectival and developmental, like integral theory.

5.4.4 Integration

Eckersley recognises the continuing utility of the nation-state as the political unit most likely to achieve an ecological polity. But the state is not left to find its own ecological destiny. She uses as political praxis the methodology of critical theory and its drive to actively change society, through both an activist-like engagement with and immanent criticism of the institutions of democracy, but also a more hermeneutical analysis of culture and cultural values, along with attention to a multitude of other disciplines, including empirical ones. She is careful to not only identify weaknesses in the stand-alone use of materialist and empirical approaches, but to remind readers

[566] *Ibid*., p.18.
[567] *Ibid*., p.19.
[568] *Ibid*., p.20.
Peter Hay, *Main Currents in Western Environmental Thought,* University of NSW Press, Sydney, 2002, pp. 204 – 208.
[569] Eckersley, *Environmentalism and Political Theory*, p. 20.
[570] *Ibid*., p21.
[571] *Ibid*.

that the critical political ecology she adopts is based on theories that are "analytical or heuristic rather than empirical."[572] We could do little better than to adopt her robust critical political ecology as the key methodology for our Terrain of Cultures, for the Polity aspect of the Tryptic. As I have noted, it is already a quasi-integral approach, as it allows emphasis on the sciences and objective systems theories (the "its"), while strongly honouring the "we," the intersubjective, in particular the need for the "good" state, or good institutions to underpin the green state -to be reflected hopefully by "good" citizens - and while also finding space for the "I," the experiential and phenomenological realms. She also calls for the development of planet- and worldcentric views, in line with an integral ecology approach. As we have seen, Wilber has acknowledged that the transdisciplinary approach of a number of the critical realists had a large impact on his own integral model and in places uses a similar shorthand to describe his quadrants. Many of the political and policy tools Eckersley proposes are multidisciplinary, transdisciplinary, and reaching a second-tier approach, at least in the breach if not in the observance, although the majority are likely to be pursued by those with a centre of gravity more in line with the ecoradical's worldview. She acknowledges that she draws on a wide range of disciplines, as befits an integral theorist. She clearly identifies the need to have such an approach. Whether it is the "political and discursive struggles over the contented meanings, purposes, and functions of social institutions", or Keane's more blunt descriptor of democracy as "who gets what, and when,"[573] Eckersley recognises that a more multi-pronged analysis is needed:

> If the state as an institution is understood merely in terms of its objective functions, and policies are understood merely as strategic responses to systemic effects, then we have no social context that can explain why and how some policies are selected over others...Thus the basic functional constraints identified by critical theorists do not appear as "objective constraints" but instead are filtered through the prism of different ideational frames by differently situated social actors within the state and civil society. While the outer limits of state policy making may still be understood as shaped by the strength of the economy, those limits are always "spongy" and contestable, as the *content* of policy can never be *reduced* to the impersonal dynamics of an economy.[574]

Here she reflects upon the need for those interobjective institutions to be underpinned by normative discourse that is informed by Habermas's communicative actions across all quadrants and spheres.[575] Such a view can appreciate and use an integral framework. For example the ecoradical ecoself can consider truth claims and perspectives that contradict their own. But, as with any wave of development, there are unhealthy aspects. The ecoradical, the green, can also sometimes indulge in what Wilber called “mean” green. This self may be overly critical of ecostrategists, seeing them as

[572] Eckersley, *The Green State*, p. 61.
[573] Keane, *The Life and Death of Democracy*, p. xii.
[574] Eckersley, *The Green State*, pp. 62-63.
[575] Habermas, *The Theory of Communicative Action Volume 1*, p. 342.

heavily dominated by an empirical objective approach to nature. The ecoradical can be scathing of the amber ecomanager, whose approach may be one of religious stewardship, which the radical may VIEW as domination (sometimes with good reason.) However, one of green's (and the political Greens') biggest problems is acknowledging and honouring the views about nature held at other waves of development. The forest contractor can experience a closeness to nature and so can an environmentalist, but the language describing the former's livelihoods as pillaging or worse does nothing to reach shared meaning, as Eckersley would have it. Second-tier approaches pull all of the values of the logger and earth-lover together and realise that each is a manifestation of human desire to sustainably manage the Earth, even if it is just the local earth, as outlined by Roger Scruton. There are some attitudes to and behaviours towards nature at all levels of development that are unhealthy and some that are healthy. This is one of the key insights that the Greens have grasped politically, but have yet to put to widespread use or tried to integrate into their political platforms, which would be challenging to say the least.

Eckersley's Green State and critical political ecology therefore already include the seeds of a second-tier, integral or "turquoise" state. At this turquoise or second-tier wave of development, individuals or collectives no longer exclusively identify with any perspective, but adopt an integrative multi-perspectivalism, which recognises the partial truth content, however limited, of other ("included but transcended") perspectives, views and disciplines. Second tier encourages healthy expression of all developmental levels without demanding that people vertically transform.[576] Eckersley's green state clearly has worldcentric views and values:

> I hope to show how a rethinking of the principles of ecological democracy might ultimately serve to cast the state in a new role: that of an ecological steward and facilitator of transboundary democracy rather than a selfish actor jealously protecting its territory and ignoring or discounting the needs of foreign lands. Such a normative ideal poses a fundamental challenge to traditional notions of the nation, of national sovereignty, and the organization of democracy in terms of an enclosed territorial space and polity. It requires new democratic procedures, new decision rules, new forms of political representation and participation, and a more fluid set of relationships and understandings among states and peoples.[577]

What is lacking is a full integral framework and interpretation of her emancipatory approach, combined with the processes, institutions and mores of Keane's monitory democracy. As one policy and political tool for a Green sate she invokes deliberative democracy, as it favours " unconstrained egalitarian deliberation over questions of value and common purpose in the public sphere, " as opposed to the liberal democratic paradigm of "strategic bargaining or power trading among self-interested actors in the marketplace."[578] It also predisposes us to being able to "recognize and

[576] Esbjörn-Hargens and Zimmerman, *Integral Ecology,* p. 125.
[577] Eckersley*, The Green State*, p. 3.
[578] *Ibid,* p.115.

respect differently situated others (including nonhuman others and future generations). It is the activity through which citizens consciously create a common life and a common future together, including the ecosystem health and integrity that literally sustain us all."[579] Such deliberative democracy has its roots in Athenian assembly democracy and has sustained its vigour during the evolution of both representative and monitory democracy, with recent manifestations in the discourse ethic of Habermas.[580]

At this juncture I will also adopt deliberative democracy as a useful policy and political tool for developing an integral state, even while recognising that it most definitely has its weaknesses. In particular, deliberative democracy is embedded in broader representative democratic processes, many of which resolve themselves through the specifically "aggregative models of democracy," such as voting.[581] While not discounting the possibility of deliberation preceding aggregation, Eckersley notes that pure aggregation does not lend itself as easily to reflexive learning. Her form of deliberative democracy (green and otherwise) requires this, and is underpinned by three elements: unconstrained dialogue, inclusiveness and social learning.[582] Dialogue is unconstrained or free when those involved in the dialogue provide transparent and public rationales or arguments for their proposals. Justified arguments should be revealed through meeting the norms assumed of undistorted dialogue, which "are that claims can be rationally assessed for their *propositional truth, personal sincerity, and normative rightness*."[583]

The implicit goal of discourse - mutual understanding - can thereby be reached on the basis of 'the unforced force of the better argument.'"[584] Here we see Wilber's integral inspired in part by Habermas' quasi-integral lens; where the propositional truth is the right-hand objective and interobjective (behavioural and systems) quadrants; personal sincerity is the upper-left, (experiential) quadrant; and normative rightness is the lower-left (cultural) quadrant. Dialogue is constrained when rational argument falls before the unhealthy memes of coercion, manipulation by misinformation, withholding of data, shortening or absence of decision-making, and denial of affected parties to be represented. We also see that the goal of the testing of public claims and proposals through the free and unimpeded flow of information is to bring *mutual understanding*. Hence we return to the Focus of the Polity, to understand the lower-left *cultural quadrant*, the shared meaning that may give policy and political decisions their legitimacy.

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[579] *Ibid*.
[580] *Ibid*.
[581] *Ibid*.
[582] Eckersley provides a spirited defense of deliberative democracy as being useful even in the face of large and complex societies where political and lawmaking power is delegated. *Ibid.*, p. 115-117.
[583] *Ibid.*, p. 116, italics mine.
[584] *Ibid*.

The inclusiveness aspect of deliberative democracy acts as a foil to the temptation to make partial or self-centred arguments. It recognises that self-interested decisions will still be made, but calls for an amelioration of that through "enlarged" or "representative" thinking, which involves the ability to imagine the views of "the other" during the public contest over norms and decisions. This type of ecological consciousness is like that of a late-stage ecoradical, with strong influences of the ecoholist (first of the second-tier waves of development).[585] Inclusiveness is extracted from the bedrock moral norm of respect for the autonomy of others; a norm which predates modern ecological politics and could be said to have gained much of its impetus during the evolution of representative democracy. Enlarged thinking calls for those proposing or defending norms to do so in a manner that may be acceptable to others.[586] Claims should be based on the unimpeded flow of information and be legitimised through quasi-integral tests of propositional truth (the "Its'), personal sincerity (the "I"), and normative rightness (the "We"). This is a "quasi-" integral approach, as it deals with only the quadrants, not levels or lines.

Social learning - and, hence, political learning - in deliberative democracy arises from the need for participants to be prepared to have their positions changed by reasoned argument. Mutual understanding would be a minimum, but unconstrained dialogue and appropriate and well-reasoned arguments would help to shift the perspectives of participants. Deliberative democracy is by its nature educative and where deliberators are flexible, inclusive and honest, they make decisions that "are adaptable and self-correcting in face of new circumstances, new information, and new or revised arguments."[587] As it " invites reflexivity, self-correction, and the continual public testing of claims" from the view of the other, deliberative democracy:

> is crucial to arresting and reversing what Habermas once called "the scientization of politics," the process whereby the lay public cedes ever greater areas of system decision making to technocratic (e.g., scientific, professional, corporate, and bureaucratic) elites.' The continual critical and public testing of normative claims, including norms embedded in scientific claims, makes it possible to expose and subject to scrutiny the assumptions, interests, and worldviews of technocratic policy professionals, politicians, and corporate leaders. In the field of risk assessment, the deliberative model points toward a more long-range, inclusive, and risk-averse orientation rather than an after-the-fact damage limitation approach. Such a posture necessarily arises when one asks the question: Would all those potentially affected by proposed risk-generating

[585] *Ibid*., p. 116-117.
[586] *Ibid*.
[587] *Ibid*., p.117.

> generating practices, rich and poor, citizens and foreigners, now and in the future, consent to such risks if they were fully informed of the potential consequences?[588]

As Eckersley notes, deliberative democracy, and in particular the communicative ideal of Habermas, mainly deals with questions around the "conditions of free deliberation", rather than addressing which "others" or beings should be represented; how they might be represented; how to address resistance from powerful political actors whose privileged position may be impacted; and questions about " the procedural and institutional challenges associated with trying to realize ecological democracy, particularly in the move from unconstrained argument to the final process of decision making."[589] The first two are questions about who and what is in a polity and who may speak for them, and in the end these are legitimised through shared and agreed values and norms (lower-left, although the inclusion of an "other" in a polity can of course be informed and legitimised in a complementary fashion by the objective and systems sciences and personal experiential perspectives).

Eckersley explores possible answers to these questions in some depth.[590] Resistance to - or indeed working alongside - powerful political actors is never easy so is always best waged in four quadrants, but some of the most powerful effects are to be gained through the use of objective and interobjective methodologies. For example, the observable behaviour of powerful actors (whether democratic, pseudo-democratic, or not-at-all-democratic) can be documented and used along with complex state-based or transboundary democratic, parliamentary, judicial and economic systems to change both the behaviour of actors and systems. This is similar to Keane's monitory democracy, where power-monitoring processes, systems and institutions (media, integrity or environmental watchdogs, large scale social and environmental non-government organisations) have a deliberative-style impact on the actions of those with power, even where those actors themselves may not be fully exposed to the normal rigours of democratic representation (e.g. dictators).[591] Finally, moving from thought to reality, from the ideal of unconstrained dialogue to the outputs of ecological or integral democracy, where theory meets realpolitik, and where theory must be rigorous to stand a chance of survival.

Deliberative democracy fits in well enough with Keane's monitory democracy, although he extracts out monitory democracy as a somewhat separate beast - albeit clearly not devoid of deliberation or

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[588] *Ibid*.
[589] *Ibid*., p.119. Habermas's discourse ethic is also confined to subjects able to competently communicate with each other, requiring the extension provided by Eckersley such that it covers all differently situated others (human and nonhuman) who may be affected by policies and decisions.
[590] *Ibid*., pp. 119-127.
[591] Keane, *The Life and Death of Democracy*, p. xxv.

discourse - and he wisely talks down any over-reliance on deliberative models alone.[592] Indeed, well thought-through and implemented deliberative democratic "monitory" groups or institutions could help to underpin his democracy, so it is one democratic tool that an integral state could utilise. Eckersley has already embedded an integral approach with her call for dialogue that includes the view of the other, a notably high first- or second-tier perspective. Other integral seeds in her conceptualisation of the state are also provided for, such as the call for deliberators to have a planetcentric and worldcentric view. However, it is not clear that the processes of the *real* green public sphere, which is "ideally a *decentred* arena of public, taking its place among a plurality of public spheres, where there is no group controlling or providing authoritative direction from any centre and no central agent of change"[593] are truly how the green movement and its political wing operate. However, it is clear that this deliberative approach *is* an aspirational ideal for which greens strive and sometimes achieve, and is at least in spirit if not complete practice with how decisions are made at least within the Green parties.[594]

Eckersley summarises this real-world problem accurately and pragmatically:

> the idealizing force of the deliberative model must confront the limitations and practical exigencies of real world political decision making where time, information, and knowledge constraints abound. Clearly, if we are to do justice to the marginal and dispossessed (including those who cannot represent themselves), and if we are to also achieve feasible outcomes, then political procedures and institutions must not be formulated in the philosophical laboratory (where power disparities are absent) but in the real world where power disparities, distortions in communication, and other pressures are ever present.[595]

Other aspects of integral are also catered for by bringing greater focus to the developmental line of ecological politics (Eckersley's tripartite, as well as my quadratic interpretation). In many ways, the integral in the Green State is brought out not by adding integral "stuff" to her work, but by recognising that many of the elements are already there and needing just an integrating framework - that is, to be framed through an integral lens, which will both assist with categorising the perspectives she brings to the analysis and also to begin the germination of the integral seeds already in her work. In many ways, the processes, conventions and institutions able to orient deliberative democracy can be defined as external, interobjective systems. However, these must help to give rise to cultural understanding and shared meaning. This is the heart of the polity, at the core of a state's *demos*, and this is where the Polity aspect of the Triptych comes into play. As noted, the Polity focuses on the intersubjective, cultural, lower-left quadrant, or cultural Terrain.

[592] *Ibid.*, p.845.
[593] Eckersley, *The Green State*, p. 86.
[594] Stewart Jackson, *The Australian Greens: from Activism to Australia's Third Party*, Melbourne University Press, Melbourne, 2015.
[595] Eckersley, *The Green State*, p. 129.

Given that the Polity is based on deliberative democracy as outlined by Eckersley, it calls in particular for *mutual understanding*. This understanding is best gained by describing the *inside* and *outside* of culture.

The *inside* we understand by examining communications within and between cultures, for example through interpretation of texts and the extraction or highlighting of shared values. With regard to Antarctic policy, this could be done by a hermeneutical analysis of the themes of personal or national exploration of Antarctica as revealed through fiction and non-fictional accounts of Antarctic exploration. Or a broader integral ethic could be outlined that informs deliberations in a range of policy areas. We can bolster our understanding of how best to develop both Antarctic policy and an integral ethic by analysing the *outside* aspects of a culture. The outside could be described using a collective version of the developmental ecoselves from integral ecology that I briefly summarised in Chapter Two. The move to articulate such values and embody them in representatives of 'the other" also needs to be informed by philosophical and epistemological views on how we know nature.

The integral model, with its quadrants, perspectives or terrains, and its developmental lines and levels, supports the view that nature is a perspective belonging to holons. Eckersley notes that this means "we cannot speak for nature in itself; *we can only speak about the nature we humans have constituted.*"[596] This is not a problem unless we are adopting "naive realist claims about the world, particularly the idea that there is a direct, unmediated correspondence between human knowledge claims and an objective reality."[597] The latter right-hand quadrant-dominated view is not one that either integral theory or Eckersley's critical political ecology accepts. Rather, practitioners of critical political ecology and integral theory recognise that "knowledge claims about the world, whether scientific or otherwise, are understood as always and unavoidably evaluative, contingent, and filtered through different social frames and social standpoints."[598]

From the perspective of integral theory, the filtering Eckersley speaks of is more like a co-arising and meshing (the so-called tetra-arising) of objective and interobjective knowledge with personal and cultural meaning. One quadrant does not arise without the other three, and each quadrant heavily affects every other quadrant, particularly the wave of development each quadrant is at. Integral ecology likewise recognises that humans can only speak about, or for, the nature that humans have conceptualised. It provides an extremely useful framework that uses multiple perspectives and methodologies to define nature. It provides a nuanced and realistic model of nature (both of how it

[596] *Ibid*., p. 122, italics in original.
[597] *Ibid*.
[598] *Ibid*.

consists of *perspectives* to us and that it exists as an extra-discursive reality with perspectives of its own), and as it transcends but includes critical political ecology, it can also draw on the latter's preferred democratic tools to reach public agreement about the norms of how we relate to nature. This taps into a key aspect of the Polity component of the Triptych: intersubjective understanding, the acknowledgement that "we do not have any *shared* access to this reality other than through discourse."[599] Indeed, "the experts themselves cannot be identified other than through discourse."[600]

However, Eckersley takes an integral view in not wanting to mistake the map for the territory:

> We may think of constructed nature as the ideational map, and real nature as the physical territory. We may discursively constitute nature, but let us not mistake the linguistic map for the manifest physical territory and thereby efface the agency of nonhuman beings and entities. Nature may be our linguistic creation, but it is not entirely our own physical creation. The point is to enable the flourishing of the territory in all its diversity - but we must always necessarily grapple with the fact that we only have shared access to this extra-discursive nature through discursive maps.[601]

That is why reaching intersubjective understanding and agreement around a political decision, policy, process, or norm is so important. Eckersley notes that even where the right of non-humans to be included in ideal discourse is disputed in an epistemological (or any other) sense, that we still "ought to accept second-best solutions for realizing these expanded norms of autonomy, since finding an approximate form of representation is better than providing none at all. This means searching for the most efficacious forms of vicarious representation, using the best of our wit, imagination, and current state of learning."[602] Integral theory and integral ecology recognise that there is a "constructed nature," consisting of the subjective left-hand quadrants, and a "real nature", consisting of the objective right- hand quadrants. Understanding of both natures is required. For example, this could involve vernacular and local understandings of environmental problems being considered along with scientific information, so "that the different purposes of knowledge generation for different ecosystems can be laid bare for public scrutiny, testing, and evaluation."[603] Eckersley notes the challenges that are likely to arise through consideration of both the complex science behind an environmental problem and the multitude of values or norms relating to that problem. The biggest challenge is *how* to make decisions despite this complexity; in short how do we determine who (or what) should be represented in a polity and who may speak for them? Should Keane's pithy description of the conversation at the heart of democracy of "who gets what, and

[599] *Ibid*., p.123.
[600] *Ibid*., p. 122.
[601] *Ibid*., pp. 124-125.
[602] *Ibid*., p125.
[603] *Ibid*., p.126.

when" change to “who *and what* gets what, and when”? Numerous democracies already have this conversation anyway. But an integral ecology framework could help to give order to the complex democratic exercise of embedding this consideration of “other” in an ecological democracy. It can help us understand and define constructed and real nature and hence work towards more inclusive solutions to environmental problems.

We cannot jump into formulating the integral state without keeping in mind the two main thrusts of green critiques of the liberal democratic states outlined by Eckersley. These are: the *way* the liberal democratic state expresses itself - its unreflexive administrative, centralised, coercive and bureaucratic structure, which works against the ideal of the green public sphere; and the actual *liberal* nature of the liberal democratic state, which "is shown to thwart the development of a genuinely public morality and associated notions of collective interests."[604] These negative aspects of the liberal democratic state are seen "when the liberal self, as economic actor, utilizes property rights in ways that privatize gains and displaces social and ecological costs on to others." In addition, the legal remedies to this displacement are limited and the public and political policy process "generates mostly ad hoc, remedial legislation based on a politics of partisan mutual adjustment and therefore continues to favor private interests over public ones."[605] These are important insights built up by decades of work by green theorists that need to be considered in any integral approach. These limitations will be with us, but they can be at least partly offset by adopting an ecological democracy based on a second-tier approach, which is able to honour yet transcend all environmental perspectives, from local to global levels. At the global level, the values shared within and between states (the intersubjective or lower-left quadrant) and the complex laws, politics, economies and ecological systems that underpin each state or which have transboundary effects (the interobjective or lower-right quadrant) are likely to need to adopt a second-tier perspective to be fully effective.

Eckersley notes that what a state *ought* to be doing in public policy requires a core normative theory that scales across multiple polities and that represents a developmental line, flowing from "its own society and territory, the society of states, global civil society, and the global environment.[606] In effect, this is a line of development representing pre-conventional (its own society and territory), conventional (the society of states) and postconventional polities (global civil society and the global environment). Eckersley has also handily worked in an additional collective developmental aspect through her Tripartite of ecological political development. Eckersley's emancipatory stage is ripe for a second-tier perspective as it is able to include yet transcend the nation-state and, indeed, calls for

[604] *Ibid.,* pp. 86-87.
[605] *Ibid*., pp. 104-105.
[606] *Ibid*., p. 1.

taking a world- or planet-centric perspective, where the needs of the planet and person coincide and "all those potentially affected by a risk should have some meaningful opportunity to participate or otherwise be represented in the making of the policies or decisions that generate the risk."[607] Eckersley notes how this ecological democracy "resonates with those deliberative and cosmopolitan ideals of democracy that seek to incorporate into risk assessment the entire universe of those potentially affected."[608]

It is a new type of democracy though, as it is based on the "argument that the opportunity to participate or otherwise be represented in the making of risk-generating generating decisions should literally be extended to all those potentially affected, regardless of social class, geographic location, nationality, generation, or species."[609] Her use of the nation-state as the likely basis of ecological democracy would find resistance among many green political theorists, who might wish to reshape or replace rather than retrofit the state, and whose broad critiques have been partly outlined. However, she argues that the state has a unique position in the holarchy of the Earth as it includes and transcends its constituent lower-level political and administrative parts, but speaks exclusively for - and generally has sovereignty over - its territory and its people. I believe an integral retooling of the state will show how the best elements of the state can be maintained. This stance recognises that “an ecological society is best not constructed according to a detailed blueprint, but will be the consequence of a well-designed and continuous process of experimenting and restructuring.”[610] And, as Eckersley notes: "... if states are so implicated in ecological destruction, then an inquiry into the potential for their transformation or even their modest reform into something that is at least more conducive to ecological sustainability would seem to be compelling."[611]

5.5 Representation and monitorism

States, particularly democratic states, also run on a key principle: representation. Without this principle, without it first having being applied to humans and then non-human nature, we would not have the political and social environment we have today. Eckersley notes: "Unlike Habermas's formulation, the critical ecological formulation acknowledges the very important role of

[607] *Ibid*., p. 11.
[608] *Ibid*.
[609] *Ibid*., p.112.
[610] M. de Geus, ‘The Ecological Restructuring of the State’, in *Democracy and Green Political Thought***,** B. Doherty and M. de Geus, eds, Routledge, London, 1996, pp. 188-211, p. 210.
[611] Eckersley, *The Green State*, p. 5.

representation in the democratic process."[612] It is here that we make contact again with Keane's broad developmental history of democracy and the core principle of representation.

To get a real feel for the nature of the gritty political realities with which we are dealing, and where democracy probably came from and where it could head, one can do little better than Keane's impressive history. It details the development of early democracy-like cultural practices in the east that were transferred to the Greeks and stunningly reinvented by other peoples in that region, leading to the development of an ecology of democracies springing up throughout the Greek world in the heady days of Athenian glory. This "assembly" democracy faded from history for various reasons only to be readopted, morphing into representative democracy from about the seventeenth century onwards. Then, over the past seventy-odd years, we have had the evolution of "monitory" democracy, where conventional power-arresting memes from the past - derived from both assembly and representative democracy - are complemented and enhanced by complex power-monitoring processes and institutions.

> The years since 1945 have seen the invention of about a hundred different types of power-monitoring devices that never before existed within the world of democracy. These watchdog and guide-dog and barking-dog inventions are changing both the political geography and the political dynamics of many democracies, which no longer bear much resemblance to textbook models of representative democracy, which supposed that citizens' needs are best championed through elected parliamentary representatives chosen by political parties... the emerging historical form of 'monitory' democracy is a 'post-Westminster' form of democracy in which power-monitoring and power-controlling devices have begun to extend sideways and downwards through the whole political order. [613]

Note that these monitoring bodies are not necessarily the top-down surveillance type of institution of which the CIA is emblematic. They include institutions and organisations such as integrity commissions, tribunals, consensus gatherings, parliamentary allocations for minorities, citizens' juries and assemblies, think-tanks, vigils, traditional and web-based media (newspapers, teleview) scrutiny.[614] These power-monitoring and power-limiting groups or institutions are complex holons with tetra-arising characteristics, and to describe them fully using an integral framework is beyond the scope of this thesis. However, Keane himself admits the complex part/whole nature of the monitory democratic terrains:

> Its latticed patterns of power monitoring effectively fudge the distinction between 'domestic' and 'foreign', the 'local' and the 'global'. Like other types of institutions, including business and universities, democracy, too, is caught up in a process of 'glocalisation'. This is another way of saying that its monitory mechanisms are dynamically interrelated, to the point where each functions simultaneously as both part

[612] *Ibid*., pp.112-113.
[613] Keane, *The Life and Death of Democracy*, p. xxvii.
[614] Ibid.

> and whole of the overall system. In the system of monitory democracy, to put things a bit abstractly, parts and wholes in an absolute sense do not exist. Its units are better described as sub-wholes – 'holons' is the term famously coined by the Hungarian-born polymath Arthur Koestler – that function simultaneously as self-regarding and self-asserting entities that push and pull each other in a multilateral system in which all entities play a part.[615]

Keane displays a very integral approach with his concepts of vertical and horizontal development in democracy. He notes that "the vertical 'depth' and horizontal 'reach' of monitory institutions are striking.[616] Eckersley's critical analysis could be usefully applied to the democratic monitory institutions Keane lists here (including political institutions and parties) and those institutions could endeavour to "populate" their objective behaviours and interobjective systems with intersubjective understandings and ethical charters on the "other" which recognise "the demos as no longer fixed in terms of people and territory" and to pursue the claim "that in relation to the making of any decision entailing potential risk the relevant moral community must be understood as the affected community or community at risk, tied not by common passports, nationality, blood line, ethnicity or religion but by the potential to be harmed by the particular proposal, and not necessarily all in the same way or to the same degree."[617] According to Habermas, a person will interpret an action depending on what it means to them and their culture, [618] or what EZI would call the ecological centre of gravity of an individual or her culture. Eckersley acknowledges that a person's conception of "good" can only be obtained "through membership of a language community and culture in which individuals are located." [619] By extending our understanding of community to include non-human nature, we include - albeit indirectly - these "others" in the deliberations that give rise to problem-solving ecological worldviews. Critical political ecologists can bring attention to the Terrain of Systems and Terrain of Behaviours by highlighting the connection between ecosystem integrity and individual and collective human well-being.[620]

The critical thing is that a deeper focus on these intersubjective understandings - reached through ideal deliberative processes - would add to the power-monitoring and power-steering functions of monitory institutions a power-*legitimising* function. That is, the "good" state would be legitimised by a combination of: "communicative abundance" (Keane's term for the plethora of media and information now available from media institutions, political parties, other "monitory" bodies and the general citizenry - particularly facilitated through the internet);[621] application of deliberative

[615] *Ibid*, p. 717.
[616] *Ibid.*, p.698.
[617] Eckersley, *The Green State*, p. 111.
[618] Habermas, *Moral Consciousness and Communicative Action*, p. 25.
[619] Eckersley, *The Green State*, p.105.
[620] *Ibid*.
[621] Keane, *The Life and Death of Democracy*, pp.736-742.

democracy based on the communicative ideal, the unconstrained communicative action of Habermas - with Eckersley's ecological slant - and the actual 'on the ground' monitory democratic institutions acting objectively (and interobjectively) in individual states and across and between states. Hence, the goal is to inculcate a new ecological worldview into monitory institutions. As this worldview would be based on comprehensive communicative action, it would work contrary to the dominance of steering institutions that have come to divorce strategic action from communicative action. Unconstrained normative discourse acts against the colonisation of the lifeworld by the system and the instrumental values of the systemic world. [622]

Political language has adapted to reflect the new reality of monitorism and to my mind the buzzwords and democratic tools used are strangely in accordance with what a "good" state might aspire to, particularly with regards to deliberation over what “democracy” should be: "'empowerment’, ‘high energy democracy’, ‘stakeholders’, ‘participatory governance’, ‘communicative democracy’ and ‘deliberative democracy’"; but also "surveys, focus groups, deliberative polling, online petitions and audience and customer voting"; and "where the old rule of ‘one person, one vote, one representative’ – the central demand in the struggle for representative democracy – is replaced with the new principle of monitory democracy, ‘one person, many interests, many voices, multiple votes, multiple representatives.'"[623] Without naming it so, Keane recognises the integral nature of current democracies. A monitory institution or actor using an integral framework would have a nuanced map for describing the one person, the many interests and voices, and the multiple enfranchisement and representation inherent in post-Westminster democracy. Such a framework could help plot a route to bring change to political and policy terrains. Many monitory institutions and actors are already powerful advocates for the good state. If they used an integral framework, informed by Eckersley's critical approach, these actors would more fully meet their obligations to provide the demos with alternative perspectives and more accurate and relevant information on the workings and performance of government and non-government actors. Already, they help to define, examine and enforce shared public (intersubjective) understanding around the mores, rules and laws to prevent, for example, inappropriate behaviour and corruption. They are also committed to "strengthening the diversity and influence of citizens’ voices and choices in decisions that affect their lives – regardless of the outcome of elections."[624] The end-game is a juxtaposition of integral values, unconstrained dialogue, and willing monitory actors. This will require an integral approach for a system that is now clearly integral in expression. The integral framework can also help us grasp the vertical and horizontal complexity of democracy and provide

[622] Habermas, *The Theory of Communicative Action Volume 1*, p. 342.
[623] *Ibid*., p. 691.
[624] *Ibid*., p. 693.

monitory actors with a post-emancipatory and integrative ethic. The role assigned to integral theory in this chapter is necessarily a broad one, going beyond just a case study on Antarctic policy. The focus has not so much been on how intersubjective understanding of Antarctica can be reached by a polity, but on the broader use of Eckersley's integrative critical approach as part of any IPT methodology. An analysis of her suggested critical approach to achieving an ecological state reveals an integrally-informed view on the limitations and powers of various disciplinary approaches and the need for multi-level unconstrained dialogue.

5.5 A Polity beyond the ice

Although the Polity aspect of the IPT relates to the Terrain of Cultures, we have already seen how, when it comes to understanding and contributing to the debate of norms, we are immediately drawn into Habermas's worlds, Wilber's quadrants ,and EZI's terrains. That is why Eckersley's critical political ecology and its Habermasian base are key theories used for data points in this study. However, returning briefly to the Terrain of Cultures, I earlier identified several broad disciplines that could help us understand this terrain, such as hermeneutics or ethnomethodology. These disciplines could be used to explore the cultural terrain of Antarctic policy. However, for my exploration of how integral politics and integral democracy might play a part in Antarctica, I wanted to work with a broader intersubjective brush that would paint a picture of how an integral approach could help to inform *all* policy and politics*,* not just those concerning Antarctica. The outcome from the Polity component of the Tryptic must be to construct - via deliberative and unobstructed communications between policy actors - a set of intersubjective meanings that allow us to extend community to the "other."

The good ecological state envisaged by Eckersley would be underpinned by such deliberation and a worldcentric consideration as it has good (monitory) institutions, behaviours, systems and processes in place, and good intersubjective understanding between the voter (the one) and the many other interests and voices and multiple representatives that are in the age of monitory democracy. We have seen at least a possibility of how, as representatives, monitory institutions (including political parties, whether environmentally-based or not) could usefully bolster their efficacy, but more importantly, *legitimacy*, with integral principles. This chapter has so far explored how policy actors - in the form of monitory or other institutions - attempting to effect change can reach shared political and policy understandings with the polity (or their polities) by adding to their power-monitoring and power-steering functions a power-*legitimising* function; best done by these institutions adopting something akin to a post-emancipatory or integral approach. This would facilitate the cultural interactions through which we find shared meaning. In particular, an integral approach could find

ways to enact that meaning so as to honour the way people are "embedded" in nature in the experiential (person), cultural (polity), and the empirical and systemic (planet) realms. As well as using Eckersley's critical approach, my post-emancipatory framework takes place in the 'democratic background' of monitory or post-Westminster democracy, with its multiple power-monitoring institutions such as the media, the internet, integrity and anti-corruption commissions, the polity itself, political parties, and think-tanks. Keane's developmental track of democracy, from assembly democracy, representative and monitory democracy was explored briefly. It forms a kind of geological crust for the postmodern story I am building, with the development of ecological politics occurring particularly during the more recent period of monitory democracy as we currently know it.

Despite my optimism about the possibilities of monitory democracy, I agree with Keane's wise insight about the contingent nature of democracy. We saw how Eckersley's model for the green state already uses a strong multi- and transdisciplinary base. It also is complemented by an associated developmental framework: her "stages" - or tripartite - of ecological democracy and her understanding of the way social actors react depending on the development of their individual moral self or ecoself. She rightly points out the flaws in relying on predictions based purely on objective behaviours of individuals or systems, stating that such predictions should be complemented by an analysis of the intersubjective histories and cultural interactions of the social actors within a system. This is why no state relies solely on either pure consent or pure coercion. Modern hegemonic states in particular do not only rely on their material capacities, but try to influence the international order so that the "shared understanding" reached is as close to universal as possible, but also as self-serving as possible.[625] Antarctica, climate change and other environmental issues are heavily influenced by these types of material and instrumental - yet also heavily communicative - aspects of global politics.[626]

I showed how the integral seeds in Eckersley's work could be partly germinated by considering the development of an additional stage in her history of ecopolitics, being a post- emancipatory or integral stage, which I labelled as "integration." I briefly outlined her three stages and showed how each has focused on different terrains and that my added fourth stage of integration is intended to bring forth an integral and second-tier perspective. This integrative approach could be adopted by a broad base of policy and political actors, particularly the monitoring institutions and actors of a monitory democracy; hence my term *Integral Monitory Democracy*. Such a democracy would be peppered with monitory actors informed by this kind of integral approach. They would not only

[625] Eckersley, *The Green State*, p. 38.
[626] Terhalle and Depledge, 'Great-power Politics'; Hemmings, 'Antarctic politics in a transforming global geopolitics', p. 507-508; Klaus Dodds, 'Antarctic Geopolitics', in *Handbook on the Politics of Antarctica*, pp. 199-214; Anne-Marie Brady, 'The Past in the Present; Antarctica in China's National Narrative', in *Handbook on the Politics of Antarctica*, pp. 284-300.

have a nuanced method for reaching that all-important shared understanding (Polity). They would also be informed by empirical and systemic disciplines (Planet), a deep understanding of individual experience and psychology (Person), as well as an appreciation of the way development occurs in each terrain. Nevertheless, Eckersley's call to include ecological actors as part of the policy landscape helps to facilitate a kind of transboundary and integral democracy, which would be made up of the elements of assembly, representative and monitory approaches that ideally represent its true spirit. Keane's understanding of the extremely complex - and indeed, integral - nature of democracy and states was demonstrated and his monitory institutions were briefly described. I then traced a hypothetical path for those actors to advocate an integral vision of the "good" ecological state. This is a state where communicative action on human relationships with nature is free and unconstrained, leading to institutions that are underpinned by the norms arising from this free deliberation, rather than purely instrumental norms derived from within the Terrain of Systems. When it comes to Antarctica, a range of values need to be considered. [627]

5.6 Applying the "We"

One problem with considering the use of a concept like social holon to underpin the methodological aspect of the Polity is whether the higher ecoselves can actually become widely established and expressed in social holons.[628] An individual may reach these lofty second-tier heights. But are they, through their influence on communicative actions in the Terrain of Cultures, able to generate ecologically-based problem-solving worldviews that become embedded in both the lifeworld and the systems world? The use of the term "we" could be problematic when applied to complex problems. That is why Annick Hedlund-de-Witt says that "the nature of worldviews remains controversial", and "it is still unclear how the concept can best be operationalized in the context of research and practice."[629] The use of integral versions of Eckersley's ecological democracy and Keane's monitory democracy helps to overcome potential problems in applying concepts of social holons to environmental, sustainability and democratic issues. This is because the actions proposed through their theories and approaches take into account cultural holons (collective worldviews), experiential (or intentional) holons, and systemic holons - examining them in the context of their arising together. We certainly want to avoid the mapping of complex social holons (lifeworld and system) using methods primarily designed for use on individuals.[630] Eckersley relies on Habermas's

[627] Rohani Mohd Shah, 'Public Perceptions of Antarctic Values: Shaping Future Environmental Protection Policy', *Procedia - Social and Behavioral Sciences,* 2015, 168, pp. 211 – 218; Daniela Liggett and Alan D. Hemmings, eds, 'Exploring Antarctic Values: Proceedings of the Workshop *Exploring Linkages Between Environmental Management and Value Systems: The Case of Antarctica*,' University of Canterbury, Gateway Antarctica Special Publication Series, Number 1301, 2013.
[628] Schwartz, 'On Social Holons.'
[629] Hedlund-de Witt, 'Worldviews and Their Significance for the Global Sustainable Development Debate', pp. 133-134.
[630] Schwartz, 'On Social Holons.'

communicative action, which when executed properly *actually addresses* Person, Planet and Polity. So too does Keane's monitory democracy. It relies on institutions that will, via the promotion of unconstrained dialogue, act according to communicatively-reached understandings that bear legitimacy. The same institutions will not only increase the steering capacity of society, but also ideally act against those steering institutions that have money and power as their base instrumental values, which have been derived from strategic imperatives, rather than actions leading to shared understanding or consensus.[631]

The "already"-integral nature of the theories and philosophies I use as data points for the IPT, and the inclusion of these theories in an integral ecological framework, means that I examine and apply the Polity not just to the lifeworld, to worldviews, to the Terrain of cultures, but across all *three* of Habermas's' domains. This broad-brush approach will of course run into problems if a form of quadrant absolutism occurs, that is, if we try to apply the Polity *alone* to complex ecological and political problems. Despite the likelihood of some interpretation and application problems, the concepts of worldviews, of "we", is definitely here to stay. Habermas is one in a long line of "worldview" philosophers. De Witt traces the development of the differing concepts of worldviews, beginning with the *Kosmos* of the Greeks, Plato's 'one and unique world', and Kant's *Weltanschauung* (later translated to worldview), which were more about an intersubjective approach - to Goethe's own experiential life world, or *Lebenswelt*, which paved the way for "the individualizing of the worldview concept."[632] She also examines the worldviews in Hegel's *geist*, Nietzsche's perspectivism, Heidegger's "Die Zeit des Weltbildes," or "the age of the world picture", and the way these philosophical lines of inquiry helped nourish "the seeds of postmodernism that were originally planted during Kant's epistemological revolution."[633] Postmodernism was, of course, hostile to worldviews and suspicious of any meta-narrative; its practitioners acted instead to deconstruct worldviews, frameworks and what we took for granted.[634] She identifies critical theory and the work of Habermas as counters to the "anti-hierarchical and nihilistic stance" of postmodernism. Habermas not only posits a developmental framework for social evolution, but includes individual (moral) and systemic development. His measure of the 'rationalization' of the lifeworld is the extent to which culture (Polity), society (Planet) and individual intentionality (Person) are separated.[635] This separation is not about precluding a reconstructive postmodern agenda, but recognition that each domain can be understood on its own terms. While each domain must be

[631] Habermas, *The Theory of Communicative Action Volume 1*, pp.341-343.
[632] Hedlund-de Witt, 'Worldviews and Their Significance for the Global Sustainable Development Debate', p. 143.
[633] *Ibid.,* p. 150.
[634] *Ibid.,* p. 151-152.
[635] Habermas, *The Theory of Communicative Action Volume 2*, pp.151-153.

included, the development of steering media superimposes the imperatives of one domain (strategic-instrumental values of the system world) onto another (consensual deliberation in the lifeworld), resulting in a 'decoupling' of domains.[636] De Witt also notes that critical theory, Wilberian integral theory and Bhaskar's critical realism "share postmodernism's commitment to including multiple perspectives and dismantling the constructed nature of (social) phenomena", but also provide for integration and reconstruction by revitalising and acknowledging concepts of human development, cultural evolution and scientific endeavour. Hence, they are likely to be important contributors to ecological discourse "as they potentially offer a new vision on the developmental integration of humanity and nature, in a manner that is both critical and reflexive."[637] This helps to demonstrate the applicability of Eckersley's critical political ecology and its EZI adaptation. Where it is not clear if higher collective worldviews on sustainability issues are sustained in groups, and the application of the "we" is problematic, other qualitative developmental methods - such as action logics - can be used to more accurately measure in individuals the presence of particular ecological or sustainability worldviews.[638] Some work has also been done on the relationship between individual and collective stage growth and development.[639] Such studies provide an excellent understanding of individual development and its relationship to sustainability. Their focus is the use of constructive developmental theory *as one aspect* of an integral approach. Many of their methodologies focus on collecting middle-range qualitative data to inform the actions logics/constructive developmental model and in that sense they are not (heavily) metatheoretical in nature.[640] And while the Polity focuses on the development of a broad theoretically-derived democratic base, a skilful application of such rigorous disciplines within an integral framework is essential to developing an effective IPT. Having explored the Terrain of Cultures, the Polity, I now turn to the third and last element of the Integral Policy Tryptic, namely the Person.

[636] Habermas, *The Theory of Communicative Action Volume 1*, pp.341-343.
[637] Hedlund-de Witt, 'Worldviews and Their Significance for the Global Sustainable Development Debate', p. 156.
[638] Divecha and Brown, 'Integral Sustainability.'
[639] Terri O'Fallon, 'Developmental Experiments in Individual and Collective Movement to Second Tier', *Journal of Integral theory and Practice*, 2010, Volume 5, Number 2, pp. 149-160.
[640] Mark Edwards, 'Evaluating Integral Metatheory: An Exemplar Case and a Defense of Wilber's Social Quadrant', *Journal of Integral theory and Practice*, 2008, Volume 3, Number 4, pp. 61-83, p. 65.

6. Person

6.1 Person: The Integral Policy Adviser

One criticism of integral theory is that much of its history and its background and theory have favoured examination of individual, as opposed to social holons.[641] For good reason, the promulgation of integral approaches has been underpinned by academic, business and vocational training that by necessity requires its participants to aspire to a second-tier perspective, which one can only really achieve as an individual. I personally do not have a problem with this approach and believe that Wilber has generally provided a model that can allow for a balanced analysis of social and individual holons. The Integral Policy Tryptic is also clearly not lacking in examination of social holons, having a powerful approach to analysing the intersubjective realm via Eckersley's critical political ecology. Also, the emphasis on individual development has created a host of practices and processes that an integral practitioner can use while focusing on the Person. In this thesis, the key is what Zimmerman calls 'enact' integral ecology, which in essence makes it a driving praxis:

> to "enact" integral ecology means always strive to operate from a second-tier perspective, one that includes insights from many different domains, not the least of which are insights drawn from premodern, modern, and postmodern centers of gravity. Failure to start from second tier will mean that would-be integral ecologists will almost always operate from a green altitude/postmodern standpoint, even without intending to do so. To enact integral ecology means not only being able to appreciate the value of green-altitude views, but also to show their limits. Showing limits means to criticize, an activity that typically leads to puzzled and angry responses from postmodernists who may well ask if integral ecologists are really *ecologists* at all.[642]

As well as learning holistic higher-order practices, which help transform our perspectives and give access to nondual awareness, we also need to gain more political nous or "skilful means." Policy officers, advisers, electorate staff and politicians are particularly well-advised to gain a thorough knowledge of current academic studies on the workings of political offices and their interactions with the community, their polity, the public or civil service, and relevant monitory institutions. Many of these studies and investigations (and even descriptions of experience) have been formally published[643] and several have been published online.[644] As we are focusing on the "I," the Person, we are focusing on what an ideal "integral adviser" would look like. As an adviser with that aspiration, I could not bear to see a government being run without at least a core group of key MPs, chiefs of staff, party officials, and other staff being familiar with the practices and lessons to be learned from

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[641] Schwartz, *On social holons*.

[642] Zimmerman, *Rethinking the Climate Change Debate from an Integral Perspective*, p. 116.

[643] R.A.W Rhodes and Anne Tiernan, *The Gatekeepers: Lessons from Prime Ministers' Chiefs of Staff*, Melbourne University Press, Carlton, 2014.
Ian Holland, 'Accountability of Ministerial Staff?', Department of the Parliamentary Library, 2002, Research Paper no. 19, 2001-02, available at http://www.aph.gov.au/library/.
Anne Tiernan and Patrick Weller, *Learning to Be a Minister: Heroic Expectations, Practical Realities*, Melbourne University Press, Carlton, 2010.

[644] Mark Madden, *Generals, Troops and Diplomats*, 2013, accessed 27 July 2016, URL: https://www.smashwords.com/extreader/read/364970/6/generals-troops-and-diplomats.

such important literature. I have observed myself, as have others, how often the incoming government seems not to have read the basic manual.[645] The development of skilful means is a key part of the Person; of personal interior development. However, the "means" themselves may be any combination of disciplines or approaches from all four terrains. Some policy advisers could make an integral management approach a key outcome for both the public service and offices of Prime Ministers, Premiers and Ministers and Government working as a whole.[646] Though a complex project overall, its essence could be distilled to some basic core practices and processes. The other aspect of the Integral Policy Adviser could be a departmental policy official who uses similar integral frameworks. As Mackie finds, the skills and *agency* of particular policy officers can have a huge influence on the success important environmental or economic stimulus programs.[647] While Ministers can be sometimes wary of public service agendas and individuals, the value of having politically-savvy, yet bureaucratically-adept officials cannot be underestimated. The disengagement of the political executive with the departmental or civil service is one likely reason for errors in governance and policy (and hence political) failures.[648]

The main focus for the Person aspect of this Antarctic policy Tryptic will be on my own individual interior development in relation to an experience of travelling to Macquarie Island, including a brief description of the ways in which a political or policy communications strategy could be crafted to appeal to my ecological self. In drafting this experiential section, it was my original intention to achieve a pseudo-Lopezian feel, but I soon realised that I am no Barry Lopez.[649] My phenomenology skills, at least in terms of fluid prose, may be somewhat lacking, but the original described experience provided a reasonable launching pad for an analysis of how my ecoselves and ecological "centre(s) of gravity" affected my experience of the journey. Rather that relaying the whole journey here in this chapter, I will instead provide a broad outline of what my current ecoselves might be like now in relation to Antarctica and use selected anecdotes from the journey to help illustrate this developmental aspect.

The methodology for this chapter, then, is an integral version of a phenomenological and transpersonal research approach known as organic inquiry.[650] Given Wilber's beginnings in the

[645] Laura Tingle, 'Political Amnesia: How we Forgot How to Govern', *Quarterly Essay,* 2015, Volume 60.
[646] Marco Antonio Robledo, 'Integrating Management Theory: Using the AQAL Model for Multiparadigm Management Research', *Journal of Integral theory and Practice,* 2013, 8(1&2), pp. 57–70.
[647] Kathleen Mackie, 'Success and Failure in Environment Policy: The Role of Policy Officials', *Australian Journal of Public Administration*, 2016, 75, pp. 291–304.
[648] Tingle, *op. cit*.
[649] Writer known widely for his environmental concerns. His book Arctic Dreams is considered a classic of the genre (see Barry Lopez, *Arctic Dreams: Imagination and Desire in a Northern Landscape*, The Harvill Press, London, 1999).
[650] William Braud, "An Introduction to Organic Inquiry: Honoring the Transpersonal and Spiritual in Research Praxis." *The Journal of Transpersonal Psychology*, 2004, 36 (1): 18-25.

transpersonal field, I believe this is a neat way to conclude the thesis, as many good narratives turn full loop, returning to their origins. The organic inquiry method typically involves: having an attitude to research that treats it as a sacred 'ritual'; providing room for the unconscious to inform writing and research; being open to a multiplicity of interpretations and stories, including the researcher's personal story; engaging in multiple approaches to knowledge gathering; and allowing both researcher and audience to, where possible, be transformed by the building and the knowing.[651] Also, as Mark Edwards notes, while metatheorising has been seen as too abstract, we should not be overly concerned. After all, "the The act of abstraction is fundamentally tied to the possibility for visioning something new and to our ethical capacities to imagine how things might and even ought to be. Consequently, metatheoretical research can be very abstract but also intensely practical and ethical in purpose and application."[652]

This section concerns the subjective upper-left quadrant or Terrain of Experiences, and a description of the inside and outside of that quadrant or terrain. This is the terrain that deals with my (first-person) direct experience and an analysis of that experience from the "outside," using the ecoselves as a personal/individual “structure” to build a picture of my ecological self. As noted, I had hoped to provide a direct description of my experience getting to, around, and from, Macquarie Island. In the tradition of phenomenology I tried to provide a description of my experience without attempting any initial explanation or interpretation. This was done by the use of notes taken during the trip and factually documenting and reimagining of the expedition through a photographic journal, with writing sometimes occurring using a soundscape of ambient Macquarie island sounds, or other ambient music tracks. While most of the direct experience I described was written out in "one sitting", there were also several gaps where purely objective and interobjective subjects were considered in light of the experience, as well as considerations of the individual experience and behaviour of previous (and real) Antarctic explorers. The following interpretation is based on an organic inquiry method using personal experience and knowledge of the nature of particular Antarctic explorers. It is also based on a best-fit -albeit hopefully instructive - interpretation of the ecoselves, rather than the more rigorous qualitative approach taken, for example, by Divecha and Brown, who use an adaptation of action logics to give rigour to a developmental framework for sustainability worldviews.[653] However, other authors have shown how the ecoselves can be a useful

[651] Jennifer Clements, Dorothy Ettling, Dianne Jenett and Lisa Shields, 'Organic Research: Feminine Spirituality Meets Transpersonal Research', in *Transpersonal Research Methods for the Social Sciences: Honoring Human Experience*, edited by William Braud and Rosemarie Anderson, Sage Publications, London, 1998 pp. 114-127.
[652] Edwards, 'Misunderstanding Metatheorizing', p. 732.
[653] Divecha and Brown, 'Integral Sustainability.'

framework for self-understanding, for determining how sustainability leaders affect their organisations, and for building self-awareness.[654]

6.2 My ecoselves and Macquarie Island

With regard to Antarctic policy and politics, I would say that my ecoself centre of gravity is mainly a mixture of eco-strategist and eco-radical, with at least a small dose of eco-holist and eco-integralist. The eco-strategist in me emerged from a childhood spent in the world of geology, palaeontology and zoology; from an early age I showed interest, and by parents and relatives had that interest multiplied, in these formal studies of the natural world. This continued into my graduate and postgraduate university studies, where the focus was ecology and zoology. The objective and interobjective basis of my youth and training means that my bias is generally towards interpreting reality through a scientific framework. Before my trip to Macquarie Island my main way of understanding and relating to the island was predominantly through empirical approaches. This was particularly so as the pest eradication project I travelled to observe was based heavily on using scientific means to restore an ecological system. I had previously worked as a ecological and communications officer for a large restoration project in the Flinders Ranges, South Australia[655] and was well-versed in such programs and probably well-suited to the task of observing these systems-based policies. More broadly, the scientist in this ecoself supports technology, progress, and rationality, although I also strongly acknowledge emotional aspects of environmental protection and the intrinsic worth of people and nature. A political or policy communications strategy aimed at the eco-strategist in me would for example use images and messages based on scientific data, the opinions of well-respected academics, and a call for technological progress that does not necessarily exclude a healthy profit. One only has to think of classic climate change communications, which combine things like the promulgation of general trust in the combined opinion of the vast majority of climate scientists, messaging from high profile writers and researchers, and a call for an ecological modernisation through transition to a carbon-free economy.[656]

My eco-radical self or, as I prefer to say, eco-*equality* self, is not only aware of objective facts (Terrain of Behaviours) and the higher order political and ecological systems in which we are embedded (terrains of systems), but is also aware of how we are connected through shared experience and intersubjective understanding (Terrain of Cultures). That aspect of my ecoself is able

[654] Rogers, 'Exploring our Ecological Selves within Learning Organizations.'
[655] Known as "Operation Bounceback," a Government program carried out cooperatively with both grazing leaseholders and landowners in South Australia. It utilised integrated vertebrate pest management (control of foxes, rabbits and goats) and monitoring of a range of species (pest species and vulnerable natives like the yellow-footed rock wallaby) and vegetation communities (saltbush, grasslands).
[656] Brown, 'Integral Communications for Sustainability.'

to appreciate conflicting truth claims and support pluralistic worldviews. I am able to appreciate the interiority of beings (individuals) and cultures. This aspect of my ecoself can, then, appreciate the shared cultural mores around Antarctica and how these are connected to complex interobjective political, economic and ecological systems. For example, I am cognizant of the shared political understanding around the role of scientific research in Antarctica as a proxy for sovereignty, and how that connects to the multilateral agreements in the Antarctic Treaty.

Another example of interiority emerged on the journey to Macquarie Island on the *Aurora Australis* where I recall a surprisingly warm afternoon heading into a lazy-feeling evening and that day's exercise session for Hamish, the retired rabbiting-dog belonging to the project leader. Watching the dog run after his rope chew toy set me thinking about the role of dogs in the eradication project. The media in particular are always interested in "dogs helping us out" stories, drawn to celebrating the things humans and dogs achieve *together*.[657] Such stories operate on a number of intersubjective levels, and they would form an important part of any analysis of the Polity aspect. They indicate that we have a level of shared understanding about and *with* dogs, that through this intra- and inter-species cultural understanding, both humans and dogs modify their behaviour to achieve an outcome. Mark Beckoff explains how his anthropomorphising of his dog not only allows for his own personal "shared understanding," but makes those wider cultural mores understandable to a wider audience, as does a multidisciplinary approach to animal consciousness and inter-species communication:

> So, when I tried to figure out what was happening in my late dog Jethro's head, I had to be anthropomorphic, but I tried to do it from a dog-centered - "dogocentric" - point of view. Just because I tell you Jethro was happy or jealous, this doesn't mean he was happy or jealous like humans or, for that matter, like other dogs. Being anthropomorphic, in a reflective way, is a tool to make the thoughts and feelings of other animals accessible to humans. While we surely make errors from time to time, we're pretty good about making accurate predictions in the realm of the mental. Not to mention that the validity of our anthropomorphic descriptions become all the more strengthened when we collaborate them with findings from other methodological investigations.[658]

The importance of such cultural understanding was again reinforced when the media crew I was accompanying on the island did a story about the rabbiting dogs currently in action and their handlers.[659] With the success of the project, such stories have not lost their gloss.[660] My eco-equality

[657] ABC Premium News, Sep 03, 2015, 'Stamp Honour for Dogs Who Saved Macquarie Island', URL: http://www.abc.net.au/news/2015-09-03/stamp-honour-for-dogs-who-clean-up-macquarie-island/6746672, retrieved 27 July 2016.
[658] Esbjörn-Hargens and Zimmerman, *Integral Ecology*, p. xxiii.
[659] Fiona Breen, 'Evidence of mice offers timely reminder', ABC News, 27 April, 2012, accessed 27 July 2016, URL: http://www.abc.net.au/news/2012-04-27/mouse-hunt-a-timely-reminder/3977060.

self sees the importance of such stories, as they provide access to a shared cultural space that enhances our care and concern for places like Macquarie Island. A political or policy communications strategy aimed at the eco-equality ecoself would use images or messages that show sensitivity to both human and wider ecological issues. It would encourage the liberation of the disempowered (in nature, as well as the human realm) and encourage "participation, sharing, consensus, teamwork, community involvement.." and use the "symbols of equity, humanity, and bonding."[661]

The next aspect of my ecoself, the eco-holist, is (at least cognitively for me) at a second-tier level and is deeply aware of the complex overlapping legal, economic, social and ecological systems (Terrain of Systems) as well as the basic objective material processes (Terrain of Behaviours) that give rise to Macquarie Island as it is in the material world. But I also am aware of the multitude of individual and collective values and perspectives around the island and Antarctica (terrains of experience and culture) and understand the need for such perspectives, even if they may differ from my own. I know that the elements of an Antarctic policy tetra-arise in a holarchical way. Going broader than just Antarctic policy, and introducing the developmental aspect of the integral approach, I recognise how current monitory democracy has developed through a number of stages and that, likewise, ecological politics has also gone through at least three recent stages. The eco-holist in me appreciates the healthy aspects in the three stages of democracy (assembly, representative, monitory) and all three stages of ecological politics (participation, survival and emancipatory), but also sees the need for a fourth stage: an integral monitory democracy underpinned by a post-emancipatory or integrative ecological politics.

A political or policy communications strategy aimed at my eco-holist ecoself would use images or messages that reflect and reinforce the way environmental phenomena consist of a range of (tetra-arising) perspectives. It would use a clever juxtaposition of those things symbolic to each of the other ecoselves, putting them all together in a picture or weave them together in a video mandala, with perhaps a voiceover from a well-known but moderate climate scientist saying something like the following (ecoself type in parentheses): *We know that climate change should be about scientific facts and figures* (eco-strategist) *and we think many of the facts and figures show that we need to get ready to adapt, survive and thrive* (eco-warrior) *in all kinds of possible climates, all kinds ecological systems, and in all kinds of social and political cultures* (eco-equality and eco-holist). *The economic facts and figures of tooling up for this future* (eco-guardian*) show it will not cause any high level of pain for very long* (eco-manager). *In fact, it promises a wealth of new technologies that*

[660] Steve Austin, 'Macquarie Island, Once Ruled by Rabbits, is Saved by the Dogs', *The Weekend Australian Magazine*, February 20, 2016, Accessed 28 June 2016.
[661] Brown, 'Integral Communications for Sustainability.

reduce our impact on the planet and also generate strong new sustainable markets (eco-strategist). *We have to realise that we all have our own version of nature, our own version of climate change, our own views of whether or not we face an ecological crisis, but at the end of the day we are all just trying to learn how to survive on a planet that has change as a constant* (all).

The eco-integralist in me does its very best to integrate and make sense of all of the perspectives and approaches of the other ecoselves. It is the part of me that tries to recognise that no ecological - or indeed no political or democratic - reality lasts forever, and to be open and aware to the suffering in the world. It is an important ecoself to develop as it is based on compassion, for self and other, which helps to prevent the feelings of helplessness the eco-radical and eco-holist often feel at the enormity of the ecological challenges we face. I have probably not embodied this ecoself as well as I could, but this thesis reflects at least part of my efforts to do so. There are, of course, ecoselves that I have not explored here, and I would direct the reader back to Chapter Three for a brief overview. However, as noted above, I was keen to briefly consider what ecoselves might be represented in Antarctic explorers and to also look at what an Integral Policy Adviser might look like.

6.3 The Ecoselves of Antarctic Explorers and the Integral Adviser

In the library of the *Aurora Australis* on the trip back to Hobart I found some books on Douglas Mawson and other Antarctic explorers. Something in Mawson and pioneering expeditioners such as Ernest Shackleton suggests a strong affinity with the eco-warrior, the heroic ethos that likes to assert itself over the system or nature. Mawson, although probably more of an eco-strategist inspired by reason and science, notes this quality when he first meets Shackleton:

> [T]here is a physicality about him, a sense of raw animal strength, that is imposing. The explorer's broad shoulders and powerful frame mark him as a man practically *made* for hauling sledges through the polar wilderness, and no nonsense about it. [662]

We also see something of the preceding ecoself here, the eco-guardian; the "raw animal strength" is just that, raw survival instinct. Nature separated into good and evil, with establishing safety and satisfying basic needs being a priority.

Despite their strong grounding in environmental identities that gave an undoubted benefit in surviving extreme conditions, many of the leaders in Antarctic exploration would have had key centres of gravity in one or both of the eco-manager and eco-strategist ecoselves. A combination of the ecological steward (often but not always backed by laws and the commands of God) and the

[662] Peter Fitzsimons, *Mawson and the Ice Men of the Heroic Age: Scott, Shackleton and Amundsen*, Random House Australia, 2014, p.53, italics in original.

ecological rationalist (driven by science, progress and competition) would have been a potent combination, particularly when combined with their political skills - both demonstrated an understanding of how to work with the political process. Shackleton, with his primal zeal backed up by a showman's propensity for self-promotion and fund-raising, tapped into the cultural interest in Antarctic exploration. He was something of a master of the public flourish. For example, after securing government and other funding, he not only added to his promise to donate "many of the fauna and mineral specimens his expedition finds to Australian museums," but donated his lecture tour takings to local charities.[663] While he fought the public battle, those cognisant of what might spruik political interest in exploration took other avenues:

> On the back of the immense popularity Shackleton garners during the [public lecture] tour, Professor David continues to strongly urge the federal government to back him and writes another long, strong letter of recommendation, outlining the many benefits of the Nimrod expedition to Australia in particular...Investing in Antarctic exploration...would advance the course of science and also aid the establishment of an Australian national identity. [664]

In that letter much was also made of the benefit of knowing how Antarctica may affect our weather and climate and the possible lure of mineral resources. It is perhaps not surprising that a federal parliamentary motion to financially support Shackleton's expedition garnered bipartisan support. The apparently loftier goal of “doing science” was front and centre (eco-strategist). But it was also underpinned by an appeal to dominion, stewardship, material gain (from mining and whaling), and territoriality, and an appeal to contribute to the developing identity of a new state (eco-manager). Mawson was particularly sensitive to Australia’s national interests and the need to assert its influence in the region.[665]

So the primary drivers of contemporary Antarctic exploration, management and protection in some ways have not altered significantly from those of the past. Professor David’s prescient observation about national identity has proven broadly correct. Our early Antarctic explorers *are* key figures in Australian history. However, the national identity driver (*amber*) has morphed into a broader sovereignty and territoriality issue (*orange*). This is currently expressed through high-level and multilateral policy, and administrative and legal frameworks (the Antarctic Treaty, which is *green* in an aspirational and structural sense, but underpinned by amber and orange values, structures and institutions). While the overt interest in mineral exploitation has faded, the interest in the link between the Antarctic climate and our own continues to be a strong one. I think that the current multidisciplinary research agenda (albeit with a core focus on science), multilateral agreements and

[663] *Ibid* p. 55-56.
[664] *Ibid*., p.55.
[665] Nicoletta Brazzelli, 'Heroic and Post-colonial Antarctic Narratives', in *Handbook on the Politics of Antarctica*, pp. 69 - 83.

shared cultural mores around Antarctica is a policy situation with which Mawson would have been generally happy. As well as having a solid eco-strategist centre of gravity, his conservationist credentials also lend him an eco-radical sheen; particularly his efforts to successfully persuade the Tasmanian Government to declare Macquarie Island a nature reserve.

This brief exploration of my ecoselves and those of Antarctic explorers serves to show how including the Person aspect in the Tryptic can give a more nuanced understanding of the individual, how they relate to the world, and the ways through which you might try to reach a shared political understanding with them (or to identify the key influences on their politics and perspectives). Without knowledge of the person it is very difficult to understand and communicate with the polity. As well as having this understanding of their selves and others, the so-called "integral adviser" would personally strive to embody and enact integral values and do their best to instil in individuals and organisations the same values through providing a personal example and bringing integral values into the interobjective political, economic and social systems with which they interact. That is no small task, particularly if you are trying to bring a complicated framework into a realpolitik situation. When preparing myself for an interview once, I asked a policy adviser friend whether a minister would appreciate the application of such new frameworks to policy and political problems. She advised that it was possible, but much would depend on whether it could help the member get votes.

That is the reality it comes back to. It seems a trite thing and yet it is almost the opposite. The vote is Ground Politics. Do those who are enfranchised, - the public, the demos - support your values and vision? Everything proceeds from an assembly of some casting some type of vote. If I were to describe democracy as a natural system, the vote would be like the geomorphology of an area. Without the laying down of the crust, the eruptions of hills, irruptions of internal magma, metamorphosis, faulting and tectonic movements, erosion by wind and water to form gullies for rivers and lakes, there would be no base for soils (representative democracy) and in turn complex ecological systems (monitory democracy). So the instinct of a politician to be primarily concerned with votes is, while sometimes embarrassing, authentic. A well-thought out integral tryptic would make a significant contribution to any kind of politics or policy process and could also improve the garnering of votes too. But that goes beyond just trying to convince a political actor of the benefits of an integral analysis and policy approach. By all means try to convince, but it is important to realise that the government (or Minister or Secretary in a President's Cabinet) of the day is not the last word. Around them circle other individuals, the administrative or parliamentary legislature arms of

parties, and the democratic monitory institutions, all of which have a huge impact on governments, politicians and post-Westminster democracy in general. Hence the integral adviser strives to promulgate integral values in themselves, in others, and in institutions and organisations. Bear in mind that the integral adviser can emerge from any academic discipline. The thing that would distinguish them is their input to policy (or politics) through whatever mechanisms seem best. I will provide an example of this concept shortly - the "political" scientist policy-maker.

This summary of the integral adviser is something of a shorthand for the entire thesis. While an integral adviser could operate at a "cognitive-only" integral level, a much fuller embodiment of and commitment to the integral framework would have a greater chance of policy and political success. There are likely to be many barriers against the introduction of integral principles into politics. Trying to present it as an objective map only, without accounting for interior personal and collective development, and reaching a shared understanding with the polity about these values, is not a skilful way to approach the task. The integral adviser, then, would ideally be aware of, and use (directly or through accessing the expertise), the practices, disciplines and methodologies that provide an understanding of the four perspectives or terrains. More specifically, through the Integral Tryptic or a similar approach, he or she might use an AQAL analysis to take into account the Planet (objective and interobjective perspectives), the Polity (intersubjective perspectives), and the Person (subjective perspectives). The integral adviser will be aware of the developmental nature of democracy, its three main stages of assembly, representative and monitory, and the "sub-levels" inside monitory democracy, these being participation, survival, emancipation, and integration. They will be well-versed in academic and other literature about working on policy and about working in political offices. They should not be afraid of being a political (or at least, a policy) animal, who takes an active interest in and actively contributes to integral political and policy processes.

Contemplating just how "political" an integral adviser should be brings me back to the place where I started this thesis, a paper on integral approaches to climate change by Michael Zimmerman, which, in its introduction, provided background on Zimmerman's "environmentalist" credentials (given that those who criticise the establishment approach to climate change, as Zimmerman does, are often vilified as minions of the coal and oil industry.)[666] Zimmerman does critique the climate science establishment using an integral lens, which is a useful exercise. He draws attention to potential

[666] Zimmerman, *Rethinking the Climate Change Debate from an Integral Perspective*, p. 115.

problems with what he calls the politicisation of climate science, which can potentially affect the integrity of the scientific method, and he seems to want scientists to steer clear of politics:

> Policy is the outcome of political debate, which is inherently and necessarily inflected with value considerations that in many cases cannot be resolved by further scientific research. By allowing themselves to become overtly—and in many cases covertly—involved in policy debates about climate change, climate scientists have given ammunition to those who claim that climate change "hysteria" results from a left-wing/green conspiracy to install an international regime that will finally gain the upper hand over industry and capitalism, in order to "save the planet" and provide "social justice" for all.[667]

I agree that we do not want a technocracy and that science does not *directly* map onto policy or politics. While I would want science itself to be as largely free of politics as possible (which may be very difficult, as science will always reflect the politics of research funding, even where it resolutely tries to avoid muddying its boots with politics), I do not want scientists to avoid making political statements if they really feel they need to. As members of the polity, scientists should make whatever political statements they wish to make. I do not think that in the example that Zimmerman used, of scientists publishing an open letter calling for United States Government to "institute policies that impose either a carbon tax or a cap-and-trade regime to limit CO2 production," is necessarily an example of scientists trying to get their findings mapped directly on to the politics.[668] Like any actor in the policy space, they are providing advice based on their own expertise. And like any policy actors, they are free to use political (policy) rhetoric. The rhetoric adopted is *not* just informed by science (objective and interobjective), but also by their personal views (subjective) and, more importantly, it is based on a reasonably widespread shared cultural understanding about climate change (intersubjective). It is not so much a case of scientists mapping science directly onto politics. Much of the effort by scientists to train a new generation of policy-savvy scientists goes into reinforcing with trainees the multidisciplinary and multi-stakeholder *art and science* that is policy. At one unhealthy level, there is a kind of assumed technocratic superiority in giving climate science privileged status in the policy decision-making matrix, and I agree that climate change is not just a scientific "problem" to solve. However, I believe most of the leaders of this generation of politically aware and active scientists/policy-makers are aware of these nuances; clearly aware that by elevating the policy primacy of science that they are entering the political sphere. Perhaps that is something to be criticised if the actions that ensue lack integrity. Zimmerman is concerned that there is a threat to the "distinction between the domain of discussion of values and beliefs, on the one hand, and the domain of free inquiry into the workings of nature."[669] But his concern about this

[667] *Ibid*., p.127
[668] *Ibid*., pp.124-125.
[669] *Ibid*. p 128.

and the potential threat of restoring "undesirable aspects of premodern discourse"[670] is generally unfounded I think, given the sophistication of most contemporary scientist-policy practitioners.

Zimmerman could also use a tip from an integral adviser to remind him that it is not just politicians or political parties that are subject to the monitory institutions of monitory democracy. The many voices, representatives and votes inherent in postmodern democracy mean that scientists need to work to get their policy voice heard amongst all the others. They are also required to constantly legitimise their research through formal institutional and informal processes (papers refereed by peers in their Community of the Adequate, university and research institution codes of conduct and oversight bodies, reporting and analysis by the media, parliamentary inquiries, independent financial audits). Instead of mapping science onto policy, they are actually mapping science onto *their* policy, and *then* mapping *their* policy onto *their* politics (a smoother and more natural process). They then express those politics, as is their right. Zimmerman states that "…it is unfortunate that climate scientists have muddied the water by attempting inappropriately to control scientific research, to shape media coverage, and to intervene in policy deliberations."[671] I agree that inappropriate control of research is wrong, but I am not sure that there is enough evidence to condemn the entire climate science Community of the Adequate for the possible actions of those involved in the so-called "climate gate." Nor is there enough evidence to ignore the collective general consensus on climate change. It would probably have been more balanced if Zimmerman had presented his views on the scientists and institutions involved in the so-called climate gate situation, but also compared it to numerous similar actions by big companies with vested interests in continuing carbon emissions. The shaping of media coverage and intervention in policy deliberations is par for the course for big business and one wonders why scientists shouldn't do it.

In addition, the professionalisation of the scientist-policy-maker is a kind of tacit acknowledgement of the need to account for *interiors*, for the terrains of experience and culture, to win the public battle by seeking to reach a shared understanding with parts of the polity on various issues. It is a pragmatic recognition by scientist-policy-makers of the need to take advantage of so-called 'policy windows.'[672] In many ways, as soon as scientists interact with *any* policy-makers, you could make an

[670] *Ibid*.
[671] *Ibid*., p.126.
[672] This is where problems, policies and politics come together at critical times to facilitate or enable policy innovation and change. See John W. Kingdon, *Agendas, Alternatives and Public Policies,* Longman, Boston, 2011, cited in Kate Crowley,

argument that they are "muddying the waters." But contemporary scientists and policy-makers are aware of these risks and make efforts to avoid conflicts of interest.[673] In my view, Zimmerman's dissection of a few possible bad eggs in climate science was not required to propose an integral framework for climate change, although I agree with his conclusions around the need for an integral approach, and that climate change cannot be reduced to a scientific understanding and solution alone, and that "no framing is absolutely wrong, nor is any framing absolutely correct. Even the act of assessing a framing comes from a perspective that will lead the framing to show up in a certain way. In many instances, framing is the framer's way of explaining why the issue in question should *matter* to the audience."[674] One thing that should matter (to the audience of public climate scientists) is that the scientists are *publicly* funded, and, hence, the public should always be informed about the results of their research. If widespread misleading or corrupt behaviour in relation to climate data could be proved that would be a bad thing, but it would still not diminish the responsibility of publicly-funded climate scientists to report to the public the general trends in climate change that their data broadly suggests. In our monitory democracy nobody, including the academic in their ivory tower, is free from scrutiny.

This foray into the science, policy and politics of climate change is intended to demonstrate my view that an integral adviser would almost by nature have to be at least partly "political." Not in the sense of professing support for any particular progressive, conservative, or other stripe of political party. Rather, they would see that any situation or problem that arises does so across four terrains and that numerous perspectives on democracy and politics must be taken into account during the search for solutions. I agree that most scientists - most of the time - should probably stick to their objective and interobjective domains, as their specialities are where they shine. But at a personal level, and a public level for scientific leaders and scientific policy-makers, there is also a need to at least partly master the domain of discussion of values and beliefs. Such scientists could usefully take on some aspects of the integral adviser.

This chapter has provided an overview of the Person aspect of the Tryptic. When using an Integral Policy Tryptic the consideration of the Person should not be short-changed. The development of personal political nous was championed as a general principle. Moving back to the topic of Antarctic policy, I then presented an analysis of how my ecoselves and ecological centres of gravity affected my experience of a journey to Macquarie Island to observe a pest eradication project, and also how

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'Irresistible Force? Achieving Carbon Pricing in Australia', *Australian Journal of Politics and History*, 2013, Volume 59, Number 3, pp.368-381.

[673] William J Sutherland, Erica Fleishman, Michael B Mascia3, Jules Pretty and Murray A Rudd, 'Methods for collaboratively identifying research priorities and emerging issues in science and policy', *Methods in Ecology and Evolution*, 2011, 2, 238–247.

[674] Zimmerman, *Rethinking the Climate Change Debate*, p.129.

approaches to communications for each of these ecoselves. The possible ecological centres of gravity of the Antarctic explorers Douglas Mawson and Ernest Shackleton were also briefly analysed and current political drivers for contemporary Antarctic exploration were briefly noted. The exploration of the ecoselves served to show how a more nuanced understanding of personal approaches could be gained and applied to the 'ground politics' of securing votes, as long as a fuller embodiment of and commitment to integral principles (as outlined in the thesis) is adopted. The need for "political" integral advisers was raised and reinforced by the example of the scientific policy-maker, who not only freely investigates the natural world, but is skilled in the *public* discussion of values and beliefs related to their research and also able to navigate the broader democratic processes that determine "who gets what and when." The right and even the responsibility for scientists to act in this manner was at least partly justified through their need to engage with the monitory institutions and processes of postmodern democracy. With this high level survey of the person and the associated integral policy adviser, we are now equipped to use all three elements of the Integral Policy Tryptic. But will the Tryptic allow me to answer the questions I posed at the start of the thesis? In particular, can it bridge the anthropocentric-ecocentric divide; can it identify what or who is responsible for the environmental challenges we face; and can it identify solutions?

CHAPTER 7

Discussion and Conclusion

7.1 Integral theory: Multiple perspectives, levels, selves and methodologies

> Might we succeed in moving towards a new discourse of stewardship that would place bounds on consumptive uses of natural resources, without prohibiting such uses altogether? Of course, we cannot answer these questions at this juncture. But there are good reasons to believe that an effort to grapple with such concerns will come to occupy a central place in debates about the role of human actions as driving forces in the earth System during the decades to come.[675]

The thesis has introduced a new triple-pronged approach to policy and politics using an integrative or integral approach, which I have coined the Integral Policy Tryptic (IPT). I will shortly return to and summarise the key elements of the IPT. However, as it is underpinned by both integral theory and integral ecology, both relatively new areas of study, I will first briefly summarise the introductory chapters. In Chapter One I asked why we should have an integral approach to policy, politics and democracy. I proposed that an ecological politics that is able to bridge the ecocentric-anthropocentric divide is more likely to arise when it is underpinned by a multiplicity of integral ecologies. I placed the integral ecology framework I am using - the integral ecology of Sean Esbjörn-Hargens and Michael Zimmerman ('EZI') - within the field of other types of emerging integral ecologies.[676] I then provided a more detailed overview of my methodology, which is underpinned by Wilberian integral theory, Wilber's Integral Methodological Pluralism and EZI. These integral approaches were then located within the intellectual and historical tradition of integrative thought, and Mark Edwards' methodological approach for metatheorising was adopted. I then briefly summarised my proposed integral model based on Wilber/EZI, which I will apply in the thesis to the areas of policy, politics and democracy: the *Integral Policy Tryptic*. The intent was to create a model metatheoretical approach - particularly for Antarctic policy and politics - which approximates Edwards' meta-studies method for the social sciences.[677] This required the "four involvements of method, data, interpretation, and theory", and I outlined how each is addressed in the thesis.

Method was addressed in Chapters One to Three through the examination of the development of Wilber's integrative thought, an overview of EZI and other integral ecologies, and the building of the Integral Policy Triptych as "method". Data was addressed in Chapters Four to Six through the examination of a range of theories related to each component of the IPT. Here it is important to again note that metatheorising uses *other theories as data.* That is, the middle-range theory I drew upon for the IPT is itself built and tested from *empirical data*, whereas metatheory is built and tested

[675] Young, 'Why Should We Take an Interest in What Happens in Antarctica?', p. xvi.
[676] Mickey, Kelly, and Robbert, eds, *The Variety of Integral Ecologies.*
[677] Edwards, 'Towards an Integral Meta-Studies.'

from *conceptual and theoretical data*.[678] This does not preclude the use of empirical data in an Antarctic IPT, and indeed there are many examples where I pointed to the use of empirical studies (on Antarctic ecology, for example). However my focus was on developing meaning from conceptual and theoretical data through the interpretive framework of the IPT and to communicate my initial findings. In particular, I concentrated on Antarctic policy and politics as a case study for the IPT. I also sought to develop a broad political and democratic approach to underpin *any* application of the IPT. This broader approach had its origins in my exploration of the Terrain of Cultures, which is further detailed below.

To begin the development of my IPT methodology, I surveyed the origins of integral theory and the general theoretical trajectories taken by the key author and proponent of integral theory, Ken Wilber. Wilber has a science background and at university majored in biochemistry, although his main interests were psychology and philosophy. However he soon left academia and began to write his own books. His first book on the development of consciousness (*The Spectrum of Consciousness*) is considered to be one of the founding books of transpersonal psychology, and, importantly, it informed the developmental aspect of his integral theory. The early phases of Wilber's work began with the interior subjective world of the individual (a single perspective or what he would later call a Quadrant) and then moved, during his development of integral theory, to a cosmos that also incorporated physiological, cultural and social factors, that is, another three quadrants. The quadrants are the four main different perspectives available to humans, being the: subjective, or the interior of an individual (experience); intersubjective, or the interior of a collective (culture); objective, or the exterior of an individual (behaviour); and interobjective, or the exterior of a collective (systems). Each of these perspectives or domains is a different version of the "truth". One quadrant cannot be reduced to another; rather, they each reveal an aspect of reality in their own right and arise at the same time. Wilber collapsed the quadrants into a shorthand form: the *I* (subjective), the *We* (intersubjective) and the so-called *It(s)* (combined objective and interobjective). He also labelled these three as: arts, morals and science; the Beautiful, the Good, and the True; or self, culture and nature.

Wilber elaborated on the basic four quadrants by developing his Integral Methodological Pluralism. This posits that each quadrant, regardless of whether it is interior or exterior, individual or collective, can be investigated using disciplines or methodologies that look at the "inside" or "outside" of that quadrant. Hence this doubles the number of "native" perspectives to eight. The quadrants form the absolute minimum base of an Integral analysis, but any such analysis must also take into account

[678] Edwards, 'Misunderstanding Metatheorizing', p. 733.

lines, states and *types.* Hence it is known as *All Quadrants, All Levels, all lines, all states, all types*, or AQAL for short. *Lines* are the (somewhat) separate attributes that develop in a person, culture or system, which in humans could be delineated as cognitive, interpersonal, moral, emotional, kinesthetic and aesthetic intelligences or abilities. *States* are phases that may emulate certain levels or stages of development, but which are transient. They can be temporary physical states like chemical reactions or weather, or states of consciousness (subjective self) such as waking, dreaming and deep - or dreamless - sleep. *Types* are a particular class of state, level, or line, and may be present at almost any stage or state of development. Common types include "masculine" and "feminine." Lines, states and types are important. But apart from the quadrants, the key part of an Integral analysis is the consideration of *levels.*

Unlike states, levels of development do not come and go. They are - more or less - permanent, and these arbitrarily assigned stages of development occur in each quadrant in a hierarchical way. While developing integral theory Wilber adopted Koestler's term of the *holon*. This refers to wholes that are also parts. Wilber therefore labels hierarchies more accurately as holarchies. In a holarchy, each new stage or level (holon) has emergent properties and transcends, but includes, aspects of the previous stage or level (holon). To avoid labelling people or cultures, and the prejudging of what someone at a certain "level" would be like, many integral practitioners call each new emergent holon a *wave* of development rather than a level. Therefore, the top of a developmental wave is a new emergent behaviour, underneath which is the bulk of the wave, consisting of the (transformed) holons before it. An example of this kind of development is Lawrence Kohlberg's model of the evolution of moral reasoning. The base level moral worldview is preconventional (young children/egocentric). Following this is the conventional wave (law-abiding adults/ethnocentric) and, then, postconventional (individualistic pluralist/worldcentric). Each new worldview is more inclusive, more compassionate and more altruistic. Understanding such holarchies is essential for understanding integral theory. But an understanding of why so many ecophilosophies have a natural aversion to hierarchies is also important. This is because within so-called "unhealthy" or "pathological" hierarchies and holarchies the upper-order holons use their agency to dominate and repress the lower-order holons; behaviour we can observe in both individuals and societies. And it can work in reverse, with lower-order holons becoming pathological and creating problems through a negative influence on the upper-order holons (as in the case of cancer). Hence the ecophilosophical support for heterarchies, wherever possible, where each part/whole's contribution is more or less equal. However, Wilber notes that pathological heterarchies are possible, where the distinctiveness between the holons on a given level is lost, and holons are no longer defined by how they are a part or a whole. They become a part alone.

The promulgation of the healthy heterarchies preferred by ecofeminists is important, but so is aiming for the healthy holarchies of Wilber and other integralists. Ecofeminists, for example, criticise the pathological hierarchies that have negatively impacted on the environment, women and society in general, and have sought to redress instances of masculine pathological agency by pushing for society to be based on heterarchical models. However, this support for heterarchy, which is seen to embody more justice, compassion and decency, is a double-edged sword. While being driven by the sound ethical principles of freedom, altruism, universal benevolence, and pluralism, some postmodern thought has no explanatory power. That is, its purpose is not to show how we evolved to a stage of consciousness where our moral development *allows* us to conceive of such universal pluralism. Kohlberg's preconventional, conventional and postconventional stages mirror the premodern, modern and postmodern. But the aversion of postmodernism to modernism means that many postmodernists criticise the so-called "disasters" of modernity, while ignoring some of its "dignities." For example, some ecophilosophers trace the beginning of what they see as an ecological crisis from the enlightenment, from Francis Bacon, or perhaps from the industrial revolution.[679] There are many cogent arguments that support these views, and any integral approach would do well to include their analysis. However, separating out one historical facet as a prime suspect does not lead to an integral solution.

However, the disaster of modernity that many eco-critics dislike arose from one of its key dignities: the *differentiation of facts and values.* In premodern times, the dominant view was an amalgam of subjective and objective realms; the "Big Three" of arts, morals (religion) and science joined at the hip. Sometime during or after the Enlightenment, the realms became differentiated. But, as many ecophilosophers point out, this is when objective approaches to understanding the world became privileged and the primary effort was directed towards wholly reducing the subjective or intersubjective to objective or scientific facts. The dominance of Cartesian viewpoints eventually engendered a move towards restoring interiors to the natural and human-made world; hence the development of postmodernism or disciplines that explore these subjective and intersubjective matters. In their drive to restore these very important terrains though, postmodernists have often thrown the dignified modern baby out with the disastrous modern bathwater. But they still have a valid point as the differentiation was good in many ways, but also led to the *disassociation* of facts and values, where the Big Three were reduced to the Big One of scientific objects and systems. Although modernism led to the differentiation of the Big Three, leaving out the interiors of the mapmakers and cultures meant there was no *integration*. Much of the thrust of postmodernism has been to not only restore the interior, but to equally honour the Big Three. Practitioners of integral

[679] Some would go back further to premodern times to find the "split" from nature.

theory seek to transcend but include this postmodern approach and recognise that the differentiation of modernity - while having its drawbacks - was a key point in human evolution. They also seek to complete the project of integration. In short, integral theory and the integral ecologies do not discount deconstruction, but are also very much projects of *reconstruction*. A number of environmental critiques of Wilberian integral theory, in particular those mounted by deep ecology and ecofeminism, were presented, along with a defence of Wilber's theory. Sean Esbjörn-Hargens and Michael Zimmerman's honouring of numerous environmental philosophies are a key part of this defence.

7.2 Integral Ecology: Ecological Terrains, Ecological Selves and Ecological Modes

The general outline of integral theory in Chapter One provided important background to the exploration of integral ecology in Chapter Two. Even before I was aware of integral ecology, my appreciation of integral theory led me to support a strong developmental or holarchical approach to green policies and politics. I believed that the greens needed to understand and respect that people at particular waves of development have their own particular version and perspectives on nature and hence their own unique relationship to nature. As integral ecology is the environmental or ecological version of integral theory, it provides an excellent base for an integral ecological politics. Practitioners of integral ecology recognise all the elements of integral theory, but give them ecological labels. While ecologists have furnished us with descriptions of nature's exterior objects and systems, ecology more broadly has excluded the interior of experience and culture. But proponents of integral ecology try to understand our interior individual and collective relationship to the natural world, believing it is one key to changing our environmental practices. Integral ecology allows us to understand the relationships between ontology (*what* in nature is perceived), epistemology (*who* is doing the perceiving) and methodology (*how* we investigate or perceive nature). As integral ecology can aid our understanding of the development of ecological worldviews, or ways of subjectively or objectively perceiving and relating to nature, it is well placed to help bridge the divide between ecopolitical approaches that are primarily anthropocentric (human emancipation within an ecological framework) and those which are mainly ecocentric (wider emancipation of the non-human world, which has intrinsic value). Using an integral ecology framework allows us to appreciate that both approaches are "right." It also helps us to understand that it is not until a worldcentric moral worldview is reached and shared that a genuine ecocentric or planetcentric approach is possible. Given that the worldcentric wave comes quite late in both personal and cultural evolution, any ecological politics based on ecocentrism alone is unlikely to take root with the general populace. It is recognised that although politicians, political parties and

policymakers want to improve the lot of all, usually the "all" is only "all humans", or "my entire constituency". That is why an anthropocentric approach must be honoured and included in any truly comprehensive approach to resolving environmental challenges. Before outlining the contours of EZI, I provide additional information on the emerging field of other integral ecologies, such as those of Leonardo Boff, Braine Swimme, Thomas Berry Félix Guattari, Edgar Morin and Pope Francis.

Integral ecology is based heavily on Wilber's integral theory, but with its own nomenclature for the quadrants, levels, lines, states and types. The quadrants become the Four Terrains. The subjective quadrant representing the individual interior (what Wilber calls Upper-Left) quadrant is the Terrain of Experiences. The intersubjective quadrant representing the collective interior (what Wilber calls Lower-Left) quadrant is the Terrain of Cultures. The objective quadrant representing the individual exterior (what Wilber calls Upper-Right) quadrant is the Terrain of Behaviours. The interobjective quadrant representing the collective exterior (what Wilber calls Lower-Right) quadrant is the Terrain of Systems. The Terrain of Experiences is known through subjective felt-experience, such as direct perception, introspection, phenomenological investigation and meditation. The Terrain of Cultures is known through intersubjective mutual communication, such as dialogue, interpretation and understanding. The Terrain of Behaviours is known through objective observation, such as field research, sensory perception, and empirical measurement. It reflects the exterior of individual holons.

The Terrain of Systems is known through interobjective systemic analysis or functional fit, such as the study of part-whole relationships, and observation of system dynamics. It reflects the exterior of collective or social holons. Each Terrain has associated academic disciplines and different associated techniques, injunctions, and methods that can be used to inquire into each distinct perspective. The levels are taken into account by recognising three broad developmental waves in each terrain, which encompass a lot of complexity, but represent an increase in interior depth or the exterior complexity of phenomena. These three levels are a version of body, mind and spirit. With three levels in each quadrant we therefore have the Twelve Niches of integral ecology. Like any holarchical development, each new stage or wave transcends, but includes, the components of its previous stage. Each niche has groupings or traditions of experts, a "community of the adequate" that have developed methods to understand that terrain broadly and that niche specifically. Chapter Two considers a brief case study that looks at the terrains and niches of integral ecology in relation to Antarctic protection and management, and helps to flesh out the disciplines that can be brought to bear. The niches represent the "*what* is there" or the ontology of a phenomenon. But integral ecology also considers "*who"* is doing the observing. Thus, as well as having the Niches, integral

ecology also recognises that a person observing (behaviours and systems) and interpreting (experiences and cultures) nature will do so through a combination of worldviews about nature. These developmental worldviews are called the Eight Ecological Selves, or Ecoselves. Every person has a particular "centre of gravity", where one or two ecoselves are mostly dominant, but complemented by other selves. This is a version of Wilber's *Spectrum of Consciousness*, but the work of other developmental theorists such as Kohlberg, Piaget, Aurobindo, Loevinger and Cook-Greuter has contributed heavily to Wilber, Esbjörn-Hargens' and Zimmerman's' developmental frameworks. Integral theory and integral ecology arbitrarily divide their developmental frameworks into three tiers, each of which contains a series of sub-waves or sub-levels.

Wilber gives each sub-level a particular colour as a shorthand descriptor. First tier consists of six sub-stages. These are: *infrared*, the instinctual/symbiotic self, typified by a human infant who is constructing a world of objects in order to separate from their surroundings; *magenta*, the magical/impulsive self, represented by a child (or sometimes adolescent) ruled by their need to satisfy basic requirements; *red*, the self-protective/egocentric self, still impulsive, but only in the context of a developing sense of self that is able to distinguish much more strongly between (its)self and other(s); *amber*, the conformist self, rule-oriented and traditional, having a concrete belief in mythic realities, and usually unable to distinguish between self and the group to which they belong; *orange*, the achiever/conscientious self, competitive, favouring rationality in striving for success and self-governance, and being able to able to empathise with others, showing concern that is independent of their own desires, needs or values; and *green*, the sensitive/individualistic self, who observes the connectivity between people (and nature), takes on multiple perspectives by appreciating objectivity and logic, but also emphasising subjective approaches, and wanting to protect nature as well as humans. Wilber maintains that studies on the prevalence of particular worldviews show that in the United States some 70 percent of the population are at amber to orange stages, while 25 percent operate at a green pluralistic level.

Wilber interprets existing evidence on the development of worldviews to propose a tier above the first, that is, second tier. People at second tier do not exclusively identify with any perspective but instead adopt a multiperspectival approach that encourages the healthy expression of all the developmental waves and does not demand that people vertically transform. The first sub-level of second tier is *teal*, the autonomous self, aware that reality consists of numerous and overlapping systems and contexts and that all levels or stages are required for healthy development. The next sub-level is turquoise, the integral self, which has increased awareness of the suffering of nature and the world, but through enhanced compassion becomes unattached to outcomes and hence has

increased immunity against existential angst. Like teal, it has an integral framework to map reality with, but is aware of the fleeting nature of such cognitive maps and that integral approaches need to be embodied and enacted in individuals and systems. According to Wilber, around two to three percent of the population of the United States operate at the "higher" levels of green or teal level, with smaller numbers operating at the turquoise or the stages beyond. There is major overlap between the eight developmental sub-levels described here (infrared to teal) and the Eight Ecological Selves of integral ecology. Like the levels described above, the ecoselves are also based on Susan Cook-Greuter's research on the development of the self-identity line. However, the first stage (infrared) is not used and an additional level is added (indigo). Hence the first tier ecoselves are the: eco-guardian (magenta); eco-warrior (red); eco-manager (amber); eco-strategist (orange); and eco-radical (green). The second tier ecoselves are the: eco-holist (teal); and eco-integralist (turquoise). This of course still leaves one ecoself to consider. Hargens and Zimmerman identify the next ecoself as being a *third-tier* wave of development. This is a fully transpersonal wave, which transcends and yet fully includes and accepts the other ecoselves. A person operating at this developmental wave would have an extensive understanding of the complex nature of development in the terrains of experiences, behaviours, cultures and systems, and also an increased ability to self-identify with members of the natural world. Having the permanent ability to experience a number of unitive states with nature across all levels of development and manifestation, and stable access to transpersonal realities with a capacity to witness their experience, this sub-level is well named as the eco-sage (indigo).

The "how" of integral ecology was also examined, that is, the methodologies (epistemology) used by the "who" observing a phenomena (ontology). Integral ecology uses Wilber's Integral Methodological Pluralism as its methodological base, where the methodologies and perspectives describe the inside or outside of a quadrant or terrain, giving rise to (at least) eight types of perspectives. Integral ecology labels these the eight ecological modes or ecomodes. The eight native perspectives incorporate the majority of the dominant academic disciplines that humans have developed and used over the past couple of thousand years. Integral Methodological Pluralism has three principles: *nonexclusion*, or a willingness to accept the claims various paradigms and schools of thought make which have been validated by those disciplines; *enfoldment*, or acceptance that some paradigms have transcended and included more aspects of reality and so are more comprehensive than others; and *enactment*, or an understanding that the phenomena revealed by various disciplines are dependent upon the influence of ontology and epistemology and the “who” that is the researcher. The inside or outside perspectives of a holon in each quadrant are revealed by specific types of methodologies; one method cannot disclose aspects revealed by another. The

inside of the Terrain of Experiences can be examined through introspection, meditation or phenomenology, and the outside through structuralism. The inside of the Terrain of Cultures can be examined through hermeneutics, and the outside through ethnomethodology. The inside of the Terrain of Behaviours can be examined through autopoiesis theory, and the outside through empiricism. The inside of the Terrain of Systems can be examined through social autopoiesis theory, and the outside through systems theory. I consider how the eight ecomodes might be broadly applied to the four terrains as they pertain to Antarctic policy, as well as the challenges that will arise trying to instil policy and politics with integral principles.

7.3 The Integral Policy Tryptic and the Planet

The outline of the origins and main aspects of integral theory and integral ecology, the exploration of environmental critiques of integral theory, and the noting of the interface between current metatheoretical frameworks like critical realism and integral theory, set the stage for the introduction of an integral ecological approach specific to policy and politics that I labelled the Integral Policy Tryptic, or IPT. In Chapter Three I described the structure of the IPT model and what it might look like in relation to Antarctic policy, a complex area of policy consisting of numerous interiors, exteriors and perspectives that could greatly benefit from an integral approach. The Integral Policy Tryptic is basically Wilber's subjective "I", intersubjective "we", and objective/interobjective "it(s)" badged as an ecological - yet very anthropic - Person, Polity and Planet. Person is the Terrain of Experiences, and focuses on the adoption of a personal integral praxis. The example of Person provided in Chapter Six is the so-called "integral adviser", who strives to disseminate and embody integral values to individuals and organisations. Polity is the Terrain of Cultures, and focuses on the communications within and between sub-jurisdictions and individuals in the Polity and the values shared and agreed upon through these communications. In Chapter Five I provided an example of Polity: in this case not just an intersubjective approach aligned with Antarctic policy, but a broader political philosophy or ethos based on an integral adaptation of Robin Eckersley's Green State and John Keane's Monitory Democracy.

Planet is the combined Terrain of Behaviours and Terrain of Systems, and focuses on objective and interobjective policy approaches, such as the hard sciences, economic and ecological modelling, legislation and regulation, and the various disciplines used by policy practitioners. The intent of using a broader philosophical brush to describe the Polity was to show how the Tryptic can have applicability beyond just one specific area of environmental policy. The use of EZI to underpin the

Tryptic also allowed me to acknowledge the ecological disciplines that have been critical of Wilber's approach. Complementing an interobjective/objective policy with subjective and intersubjective values means that we can adapt it to a range of political philosophies. However, integral policy and politics does not have to be bipartisan (or tripartisan). Integral has an undeniably progressive sheen, but if all healthy developmental waves and worldviews are to be honoured, then a conservative integral approach is certainly possible, as are a number of progressive, green and post democratic versions. I indicated that the IPT is both my method *and* a potential new integral model, showing that it is based on the robust meta-level construction of EZI and Wilberian integral theory, and Wilber's Integral Methodological Pluralism. I indicate how I use Edward's approach by drawing on many sources of data - subjective, relational and objective - to 'populate' the IPT and then interpret that data through my proposed integrative framework. I noted how I am focused mainly on the building of a conceptual system (the IPT) to form a basis for the review and analysis of middle-range theory relevant to policy, politics and democracy. I also noted again how the main thrust of the thesis is to determine whether EZI can inform - or even improve the electoral success of environmental policies (regardless of political stripe, but with more focus on progressive and green politics); and whether integral ecologies can positively influence the policy and politics of Antarctica specifically.

In Chapter Four I then explored in more detail the Planet aspect of the IPT. A number of additional objective and interobjective ecomodes are discussed, including a behavioural science policy framework based on a Presidential Order from the United States (which recognises that *interiors* play a huge role in decision-making by individuals and collectives). The ecomode that explores the interior of the Terrain of Systems, social autopoiesis, is briefly outlined. This is used as a launching point for an exploration of the development of autopoietic studies, moving from the initial development of the concept of homeostasis to the more complex dynamic equilibrium and finally to autopoiesis. I then posited a "fourth" stage of development in autopoiesis studies: that of an integral autopoiesis which I label as Ground Autopoiesis. This is the autopoiesis underlying all of reality that acts like a conduit between the self-referential activity in one terrain and the arising of new components in another. Finally, the areas of Antarctic policy, law, ecology and politics are explored. I explained how these external systems and behaviours were matched by a cultural *framing* of Antarctica. Hence the Polity, or the Terrain of Cultures, is critical to influencing and changing the "normative discourses underlying governance systems and the principles" which guide our interactions and relations with nature.[680] I indicated that the development of such discourse would be best served by including existing ecological and democratic theories that have one of more

[680] Young, 'Why Should We Take an Interest in What Happens in Antarctica?', p. xvi.

threads of integrative thought already embedded, such as the work of Jürgen Habermas, Robyn Eckersley's ecological adaptation of Habermas and critical theory (critical political ecology), and John Keane's 'monitory' democracy.

7.4 Polity and Person: Finding Shared Agreement on Political Values and the Integral Policy Adviser

In Chapter Five I suggested ways that we might fully explore and comprehend the Polity. This relates to the Terrain of Cultures, cultural interactions and shared meaning, which provides a strong and binding ethical framework for most of the individuals making up a nation-state or other smaller political units such as electorates or "states" within nation-states. Rather than just focusing on Antarctic policy alone (that is, on more "narrow" intersubjective perspectives such as hermeneutics or ethnomethodology), the intersubjective - but also quite integral - critical political ecology of Robyn Eckersley's 'Green State' was used as a main methodology for understanding the Polity. I showed how, with regard to Antarctica, the future is predicated not only on the materials and structures of governance and societal institutions, but on the *normative discourses* underpinning these exterior systems and behaviours. Hence the value of the Polity is in being able to achieve a shared understanding on the political values around Antarctica - to develop a base of integral values that could be be inculcated into national and global institutions and organisations.

The analysis of the developmental aspect of the Polity is completed through an examination of John Keane's three stages of democracy (assembly, representation, and monitory) and Eckersley's three stages in the development of ecological thought (participation, survival and emancipation). I posited that a fourth stage in each of these holarchies could be described, being an *integral monitory democracy* (Keane) and *integration* or post-emancipatory (Eckersley). I showed how Eckersley's approach is primed for an integral interpretation as it is intersubjective, but also implicitly includes objective or interobjective disciplines. If used rigorously under a wider integral framework, an integral critical political ecology could inform the mores and ethical frameworks underpinning the monitoring (and other) institutions and individuals forming part of post-Westminster or monitory democracy (as well as those responsible for the governance of Antarctica). Integral monitory institutions would promulgate the free and unimpeded flow of information. This would be particularly the case with information related to public discourse around decision-making (and/or summaries or analyses of information by Communities of the Adequate associated with the monitory institutions). Habermas's call for unconstrained discourse is focused on what the ideal would be for such deliberation. Habermas has a system with similar characteristics to - and indeed

inspiring - Wilber's quadrants. These are Habermas's objective knowledge (its), subjective "aesthetic judgment" or sincerity (I), and "moral-practical insight" or intersubjective justness (we) [681] He also posits the two domains of the "lifeworld" and the "system", which are equivalent to EZI's Terrain of Cultures and Terrain of Systems. He does leave out an explicitly ecological interpretation by not addressing which “others” or beings should be represented. But by considering the Polity using Eckersley’s approach, which encourages a worldcentric or planetcentric perspective, we can use Habermas's integral-like principles in democratic decision-making. The Habermasian principles underlying Eckersley's' approach were explored. In particular, his unconstrained dialogue and communicative action were shown as being the keys to reaching shared understanding. I noted how Habermas considers the "systemization" of the Terrain of Systems and the arising of "steering media" as the reason the imperatives of one domain (strategic-instrumental values of the system world) are superimposed onto another (consensual deliberation in the lifeworld), resulting in a 'decoupling' of domains.[682] The use of one terrain to understand another is antithetical to integral theory and only results in further divorce and loss of insight from considering interior perspectives. Habermas also posits that communicative action occurs not just in the Terrain of Cultures, but that language works to interrelate the three "worlds": the external (inter) objective world; the social or lifeworld; and the inner world of individual experiences. Hence ,when it comes to normative dialogue the Polity is critical, but so too are Planet and Person.

By extending Habermas's approach to ecological concerns, Keane’s "who gets what, and when?" then changes to “who *and what* gets what, and when?” The "one person, one vote, one representative" basis of his representative stage of democracy becomes his post-Westminster democracy of "one person, many interests, many voices, multiple votes, multiple representatives."[683] A framework that can honour these numerous perspectives and waves of development will be useful. It is likely that such a framework will be based on a mixture of integral values, unconstrained dialogue, and willing monitory actors. That is, actually using an integral approach for a system that is actually integral in expression. The integral framework can help us to grasp the vertical (evolutionary/developmental/holarchical) and horizontal (heterarchical) complexity of democracy and provide 'monitory' actors with a post-emancipatory and integrative ethic: a truly inclusive policy and political framework that honours the individual’s views but also the many other interests, voices, votes, and representatives. This opens up the possibility of developing an ecological politics that can be applied to politics of any stripe, whether green, progressive or even conservative.

[681] Jürgen Habermas, *Moral Consciousness and Communicative Action*, p.4.
[682] Habermas, *The Theory of Communicative Action Volume 1*, pp.341-343.
[683] Keane, *The Life and Death of Democracy*, p. 691.

In Chapter Six I outlined the Person aspect of the Tryptic, which is the subjective interior of individuals or the Terrain of Experiences. The Person could be what I call the Integral Adviser, a person who tries to honour integral values and also uses a cognitive integral framework. They have political nous and use the Tryptic to better understand the policy dilemmas they face. The Person could alternatively be looked at through the consideration of my personal experience in travelling to Macquarie Island using the framework of the ecoselves, and how that could be applied to communicating with me about protection of the island, or to do a similar analysis of famous Antarctic explorers. The focus on the Person also asks how political a person can or should be, using the example of the scientist policy-maker (or at least policy *influencer*).

7.5 Concluding Thoughts and Future Directions for the Integral Policy Tryptic

The consideration of the Person brings this thesis closer to its objectives, in particular, can we identify what or who is responsible for the environmental challenges we face? Can we identify and help implement solutions? Can we bridge the anthropocentric-ecocentric divide, one of the key questions that inspired this research? Is an integrative approach useful for policy, politics and democracy? Will green, progressive or even conservative political parties continue to be successful if they do not engage with the electorate in an integral fashion? This thesis has demonstrated how environmental challenges arise due to *many* "whats" and "whos", that the problems we face are integral in nature and expression. To understand complex policy, political and democratic landscapes, and to envision and put in place appropriate solutions, therefore requires an integral approach. The use of an integral framework by environmental practitioners enables the honouring and inclusion of a diverse range of environmental approaches and views in proposed solutions. It gives us an understanding of *why* different environmental perspectives are different and how they are all (partly) important for finding a solution. It reveals that the anthropocentric-ecocentric divide is not a divide, but instead a wave-like developmental difference, and that, using an integral framework can help to honour and include both anthropocentric and ecocentric approaches.

Integral ecology helps to bridge this artificial division and also helps to answer some of the environmental critiques from deep ecologists and ecofeminists around postmodern society and indeed of integral theory. Throughout the thesis I demonstrated how one could apply integral theory to Antarctic policy and politics. The use of the Ecoselves of integral ecology, the developmental line dealing with our personal perspectives on nature, was also discussed in that practical policy context. The key methodology underpinning this thesis, Wilber's Integral Methodological Pluralism, was

adopted using the Terrains (quadrants) and Eight Ecological Modes of integral ecology (Wilber's IMP). This can provide comprehensive and pluralistic explanations and solutions for environmental problems. My new integral model for policy, politics and democracy - the Integral Policy Tryptic - took elements of Wilberian integral theory and EZI and applied them to Wilber's "I", "We" and "Its" in a more ecological version of "Person", "Polity" and "Planet". I demonstrated how the IPT model could provide a comprehensive and integrative approach for policy, politics and democracy. It enables the researcher to rigorously canvass objective and interobjective behaviours and systems (Planet) - in this case related to Antarctica - while "populating" the policy landscape with personal experience, aptitude and development (Person), along with critically developed and broadly agreed (through unconstrained dialogue) ecological and democratic values (Polity)

The methods used to reach the latter shared understanding also need to be integral in nature, reflecting Habermas's call to include the "three worlds' in any communication. Another critical aspect of this thesis was the explicit articulation of what kind of project it was: a project in metatheorising. It is not the type of metatheorising that is philosophical in nature; that is, addressing ontological, epistemological, methodological and ethical aspects of its constituent theories. Like its constituent Wilberian integral theory and EZI, the IPT uses theories as "data points", and I build and test this model "by specifying domains, collecting, reviewing and analysing 'data', developing explanations and truth claims and testing those claims on the basis of a posteriori (after the fact) methods." [684] I have analysed the constituent theories (integral theory, EZI, Habermas's critical theory, Eckersley's critical political ecology, and a wide range of other theories, disciplines and studies used to 'populate' the IPT) to create a new overarching model that successfully applies integral ecology to policy, politics and democracy, at least at a broad but robust conceptual level. As I noted earlier, the IPT needs to be road tested. A number of important new research directions have emerged, including the further application of integral principles to Antarctic policy and politics; the development of a 'conservative' version of the IPT; and the use of the IPT model by progressive or green political actors. Key considerations for an Antarctic IPT are presented at Figure 7.1.

One limitation of the thesis is the assumption that the nation state will be the key organisational structure for moving to an ecological state or society. This assumption is not necessarily made by all influential green thinkers, and, as we have seen, Keane recognises that democracy is a moving feast; its adaptation to a host of different social systems across the world and current trajectory of 'glocalisation' means we cannot easily predict its future. [685] Consideration also needs to be given to other integral approaches to democracy such as the 'Crowdocracy' of Watkins and Stratenus, who

[684] Edwards, 'Misunderstanding Metatheorizing', p. 722.
[685] Keane, *The Life and Death of Democracy*, p. 717.

are suitably prescient on the political and democratic environment we face.[686] While I agree with many of their novel suggestions for democratic practice, I would hesitate to jettison the term democracy so hastily. A crowd is still (often) just a crowd, whereas the demos *is* the people, the electorate, those with the franchise. I suggest that maintaining this etymological link to democracy's early origins is important, particularly for an integral approach, which should be developmental and hence able to honour assembly, representative, monitory and post-monitory democracy - of which Crowdocracy could well play an integral role, but which is unlikely to be adopted in its entirety. Also, I have not presented any examination of a potential 'world' government or at least world governance model. That was intentional, as in my view at least in this thesis, is that there is no reason a collection or collaboration of sovereign states could not use an integral approach to achieve what a so-called world government could do.

That is no reason to avoid thought (or actual) democratic (or other forms of political) experiments, which can help us at least understand what a global approach to the environment, politics and democracy might entail.[687] Another key point is being aware of hubris and the automatic assumption that an integral approach will be able to solve all problems. An integral method should have built-in a way of recognising and self-correcting the flaws inherent in integral approaches.[688] Despite these limitations and the boundaries of this research, I demonstrate that the use of an integral framework by policy and political practitioners would enable the honouring and inclusion of a diverse range of environmental perspectives and disciplines in proposed solutions. The enhanced understanding that arises allows us to bridge many environmental divides and helps to tailor responses that address the *many* "whats" and *many* "whos" of the environment, policy, politics and democracy. To create solutions to environmental, political and democratic problems therefore requires the mapping and understanding of complex multidisciplinary landscapes. For this to occur, an integral approach is recommended, particularly one informed by integral theory, integral ecology and the Integral Policy Tryptic model.

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[686] Alan Watkins, and Iman Stratenus, *Crowdocracy: The Future of Government & Governance (Wicked & Wise)*, Urbane Publications, Croydon, 2016. 'Crowdocracy' works on the principle that a crowd of people on average usually come up with better solutions to problems than a "bunch of experts in a room," while not discounting the need for a bunch of (integrally-informed) people to assist and steer the decision-making.

[687] John M Bunzl, 'Discovering An Integral Civic Consciousness In A Global Age: Global Problems, Global Governance, and Denial', *Journal of Integral theory and Practice*, 2012, 7(1), pp. 105–123; John M Bunzl, 'Transcending First-Tier Values in Achieving Binding, Democratic Global Governance', *Journal of Integral theory and Practice*, 2012, 7(3), pp. 24–42.

[688] Elija J Petersen and M Ellis Jaruzel II, 'Argumentum Ad Wilberiam: How Truthiness and Overgeneralization Threaten to Turn Integral theory into a New Scholasticism', *Journal of Integral theory and Practice*, June 2014, 9(1), pp. 154–162; Susanne Cook-Greuter, 'Assumptions Versus Assertions: Separating Hypothesis from Truth in the Integral Community', *Journal of Integral theory and Practice*, 2013, 8(3&4), pp. 227–236; Zachary Stein, 'On The Use Of The Term *Integral', Journal of Integral theory and Practice,* December 2014, 9(2), pp. 104–114.

PERSON - Terrain of Experiences The author's experiences of an expedition to Macquarie island to observe a pest eradication program are examined through the use of a transpersonal research approach called organic inquiry and through heeding EZI's call to *enact* integral ecology through striving to operate from a second-tier perspective[689], what I call the "integral adviser." This is given expression through an analysis of the author's ecoselves and the ecoselves of Douglas Mawson, an Antarctic explorer. The focus on the Person also asks how political a person can or should be, using the example of the scientist policy-maker.[690]	***PLANET*** Behavioural policymaking (also see *Person*): People do not usually make rational choices. Purely economic or fiscal data is an insufficient grounding for policy, which must be complemented by an evidence-based approach to policy making - one based on *actually observing the behaviour* of people.[691] It is also predicated on the behaviour of organisms in the ecosystems we study, and the exterior facet of physics, chemistry and astronomy. ***Terrain of Behaviours***
POLITY - The Terrain of Cultures The future management and governance of Antarctica is predicated not only on the materials and structures of governance and societal institutions, but on the *normative discourses* that exist in relation to both Antarctica and global policy and political issues. Rather than focus on specific intersubjective disciplines - although those are drawn upon too - a broader, and ecological, critical and democratic theory is proposed as a base layer for *every* IPT. While the theories and concepts drawn upon have their toes first, so to speak, in intersubjective waters, they are all actually integral in nature, recognising that the intersubjective only makes sense in the presence of other spheres, worlds or perspectives. Jürgen Habermas's critical theory approach – his "communicative action" - is a key philosophy for addressing this aspect of the IPT. Habermas's action is focused on reaching shared understanding[692], which is expanded into an ecological perspective through the use of Robyn Eckersley's critical political ecology.[693] Habermas's and Eckersley's critical approaches recognise that while the *outcomes* of communicative action are focused on the intersubjective (the Polity or Habermas's "lifeworld"), such action must occur in *all* Terrains or aspects of the IPT. This is part of Habermas's 'unconstrained dialogue', which acts to prevent "steering media" (institutions underpinned almost solely by the strategic instrumental values of the Planet, or system world, as opposed to values reached through consensual deliberation in the lifeworld) from usurping the lifeworld with system world values not derived from consensual deliberation. Eckersley's critical political ecology and the positive aspects of Keane's 'monitory democracy' (where the conventional power-checks of democracy are interlaced with complex power-monitoring processes and institutions)[694] form a robust base for any application of the IPT model. The value of the Polity is in being able to achieve a shared understanding on the political values around Antarctica - to develop a base of integral values that could be inculcated into national and global institutions and organisations.	The legal, political, social and ecological systems affecting Antarctic policy and politics: Legal and policy regimes e.g. - Antarctic Treaty System (ATS)[695], Convention for the Conservation of Antarctic Seals (CCAS)[696], Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)[697], Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol)[698]; Ecological studies[699]; understanding policy discourse on Australian Antarctic policy[700]; review and analysis of economic use and relationships[701]; environmental impact assessment[702]; strategic plans of government organisations and parliamentary or congressional committee reports[703] and global legal principles.[704] Antarctica as a *political space* - its future not determined purely by objective structural or material effects, but by the "normative discourses underlying governance systems and the principles that will guide human/nature relations as we move deeper into the Anthropocene"[705] This is the subject of the *Polity* and its key underpinning philosophies and theories (see *Polity*). The goal of the IPT is not to remove these systems or work against increases in their steering capacity,[706] but to ensure their underpinning (integral) values are reached through consensual deliberation in the lifeworld. ***Terrain of Systems***

Figure 7.1 Key considerations for an Antarctic Integral Policy Triptych (IPT)

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[694] Keane, *The Life and Death of Democracy*, pp. ix - xxix.

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[699] MC Kennicutt II, *et al*, 'A Roadmap for Antarctic and Southern Ocean Science for the Next Two Decades and Beyond', *Antarctic Science,* 2015, 27(1), pp. 3–18; Tanya M. Haupt, *et al.*, 'Further Support for Thermal Ecosystem Engineering by Wandering Albatross', *Antarctic Science,* 2016, 28(1), pp. 35–43; Trevor McIntyre, Ashleigh Donaldson and Marthán N Bester, 'Spatial and Temporal Patterns of Changes in Condition of Southern Elephant Seals', *Antarctic Science,* 2016, 28(2), pp. 81–90; SJ Lockhart and CD Jones, 'Biogeographic Patterns of Benthic Invertebrate Megafauna on Shelf Areas within the Southern Ocean Atlantic sector', CCAMLR Science, 2008, 15, pp. 167–192; T Iwami, *et al.*, 'Annual Changes in Species Composition and Abundance of Myctophid Fish in the North of South Georgia (subarea 48.3), Antarctica, During Austral Winters from 2002 to 2008', *CCAMLR Science*, 2011, 18, pp. 155–165; N Ratcliffe and P Trathan, 'Review of the Diet And At-Sea Distribution of Penguins Breeding within the CCAMLR Convention Area', *CCAMLR Science*, 2011, 18, pp. 75–114; SM Grant, SL Hill and PT Fretwell, 'Spatial Distribution of Management Measures, Antarctic Krill Catch and Southern Ocean Bioregions: Implications for Conservation Planning', *CCAMLR Science*, 2013, 20, pp. 1–19; D Kinzey, G Watters and CS. Reiss, 'Effects of Recruitment Variability and Natural Mortality on Generalised Yield Model Projections and the CCAMLR Decision Rules for Antarctic Krill', *CCAMLR Science*, 2013, 20, pp. 81–96.

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